IETA

GHG Market Sentiment Survey 2024/25

CARBON MARKETS IN TRANSITION: THE PATH TO 2030

pwc

In association with

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ABOUT IETA

THE INTERNATIONAL EMISSIONS TRADING ASSOCIATION (IETA) IS A NON-PROFIT BUSINESS ASSOCIATION WITH A MEMBERSHIP OF OVER 330 LEADING INTERNATIONAL ORGANISATIONS OPERATING IN COMPLIANCE AND VOLUNTARY CARBON MARKETS. SINCE ITS FOUNDATION IN 1999, IETA HAS BEEN THE LEADING VOICE OF BUSINESS ON MARKET BASED AMBITIOUS SOLUTIONS TO CLIMATE CHANGE. WE ARE A TRUSTED ADVISER TO GOVERNMENTS TO SUPPORT THEM IN BUILDING INTERNATIONAL POLICY AND MARKET FRAMEWORKS TO REDUCE GREENHOUSE GASES AT THE LOWEST COST, INCREASE AMBITION, AND BUILD A CREDIBLE PATH TO NET-ZERO EMISSIONS. SEE WWW.IETA.ORG FOR MORE INFORMATION.

ACKNOWLEDGEMENT

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THIS YEAR'S KEY FINDINGS

01

CAUTIOUS OPTIMISM DEFINES CARBON MARKET SENTIMENT. WHILE PARTICIPANTS REMAIN CONFIDENT IN THE LONG-TERM EXPANSION AND LINKAGE OF NATIONAL ETS, UNCERTAINTY AROUND INTEGRATION TIMELINES AND POLICY DESIGN HAS GROWN SINCE 2023.

02

INTEGRITY AND TRUST ARE DRIVING A NEW PHASE FOR THE VOLUNTARY CARBON MARKET. RESPONDENTS HIGHLIGHT STRONGER GOVERNANCE, QUALITY STANDARDS, AND ALIGNMENT WITH COMPLIANCE SYSTEMS AS KEY TO REBUILDING CONFIDENCE AND CREDIBILITY.

03

RESPONDENTS REMAIN CONFIDENT THAT CARBON PRICES WILL INCREASE IN THE LONG TERM, THOUGH EXPECTATIONS HAVE MODERATED. A STEADY PRICE GROWTH IS ANTICIPATED TO 2030, DRIVEN BY HIGH-INTEGRITY CREDITS, DESPITE NEAR-TERM DECLINES AND SOFTER PROJECTIONS THAN IN 2023.

04

IETA MEMBERS DO NOT ANTICIPATE THAT, BY 2030, PRICE INCREASES IN ANY NATIONAL ETS WILL BE SUFFICIENT TO REACH THE LEVELS REQUIRED TO ACHIEVE EITHER THE 1.5°C OR 2°C GOALS OF THE PARIS AGREEMENT.

05

CONFIDENCE IN ARTICLE 6 HAS GROWN SHARPLY AMONGST IETA MEMBERS, WITH 91% OF RESPONDENTS ANTICIPATING IT WILL BE A KEY DRIVER OF FUTURE CLIMATE ACTIONS, COMPARED WITH 45% IN THE 2023 SURVEY.

EXECUTIVE SUMMARY



01. ETS: Overall sentiment reflects reserved confidence. While respondents broadly support the expansion and linkage of national ETS, confidence in timelines and integration has weakened since 2023. Uncertainty around implementation and design details persists, but expectations for long-term convergence and inclusion of removals remain strong.

02. CBAM: Attitudes remain optimistic that EU CBAM will protect EU companies from carbon leakage. Recent changes the EU has made, tightening anti-circumvention rules and reducing the administrative burden of CBAM, are in line with respondents' views on the main considerations for ensuring the long-term success of CBAM. However, despite a clear legal framework, stakeholders still doubt whether the sale of CBAM certificates will commence on time.

O3. CORSIA: Respondents express muted confidence in CORSIA's ability to achieve Phase 1 compliance, with the majority anticipating undersupply of credits by 2027 and only a small minority expecting market balance. Views are shaped by scepticism over credit availability, fragmented policy alignment between the EU and ICAO, and weak enforcement capacity. While recent reforms improve transparency and reduce offset demand, sentiment remains cautious, most see CORSIA's success hinging on scaling eligible supply, ensuring consistent global enforcement, and clarifying long-term design to secure participation.

04. ARTICLE 6: Confidence in Article 6 strengthened in 2024–2025, with 91% of respondents viewing it as a key driver of climate action following the COP29 'playbook'. However, concerns persist around complex methodologies, limited host-country capacity, and weak market demand, underscoring the need for greater clarity and coordination to realise its full potential.

05. VCM: In 2024–2025, the voluntary carbon market entered a phase of transformation, with integrity, transparency, and trust emerging as core priorities amid tightening standards and evolving methodologies. Despite ongoing uncertainty and declining transaction volumes, respondents were cautiously optimistic that stronger governance, growing alignment with compliance markets, and rising demand for high-quality removal credits are signalling a more credible and resilient market ahead.

06. PRICE PROJECTIONS: Sentiment towards future carbon prices remains bullish despite falling average prices in the voluntary and some compliance markets in 2024. Lower prices have reduced confidence in the scale of price increases expected in compliance markets with all predictions lower than previous survey results in 2023 and 2022. In the voluntary market, prices are expected to increase by 2030, driven by alignment with Article 6 and national ETS. Superimposed on this trend, the price premium of high-quality credits is expected to continue to increase to 2030.



THE ABSENCE OF A FULLY FUNCTIONING REGISTRY AND THE LIMITED NUMBER OF ACCREDITED VERIFIERS APPEAR TO BE SLOWING THE PIPELINE AND DELAYING MARKET CONFIDENCE IN ARTICLE 6.4 ACTIVITIES.

- RESPONDENT QUOTE

MESSAGE FROM THE PRESIDENT & CEO OF IETA

This is IETA's 2024–2025 Market Sentiment Survey, conducted with the excellent assistance of PwC UK.

Looking back, this survey has reviewed the ups and downs of new and emerging carbon markets since their inception. I'm glad that IETA members have appreciated the value of taking the market's pulse on a routine basis, such that now we have a long-running dataset to draw upon.

In the very early days, we did not have such a professional survey as the one presented today. Long before my time as CEO, I remember an IETA gathering in a Washington DC hotel around 2001. A question arose in a session about what the global average carbon price would be in 2020?

There was not much market data, only results of a few voluntary market purchases, where pricing was occasionally reported by brokers. Compliance markets were only beginning to emerge in the UK and Denmark. The EU ETS was a distant dream, the subject of a simulation then underway by Eurelectric, the IEA and PwC UK.

As an IETA member, I suggested that the group at the event might provide as good a reference as any. So, we agreed that everybody would write a predicted 2020 price on a piece of the hotel notepaper as an informal "secret ballot." We folded them to protect anonymity, and staff passed a hat around the room to collect the papers. We had representatives from PwC UK and Arthur Anderson tally the results. As I recall, the group came up with an average price of around \$20 for 2020. (It seemed like a high price in 2001!)

Soon thereafter, then-CEO Andrei Marcu had the good sense to professionalise the survey by retaining the help of PwC UK. And so, the IETA Market Sentiment Survey began.

Now to this year's survey. In 2024, we saw massive political shifts around the world, as elections took place in countries representing over half of the world's population. In 2025, new leaders are in office. New agendas began to form on energy, climate and economies. But the political discord has continued, with a number of world leaders struggling to stay in power.

This year, survey respondents left no doubt that the geopolitical tensions are impacting carbon pricing sentiment. The ongoing global conflicts – and the Trump administration's tariff agenda – present uncertainties for energy and carbon markets.



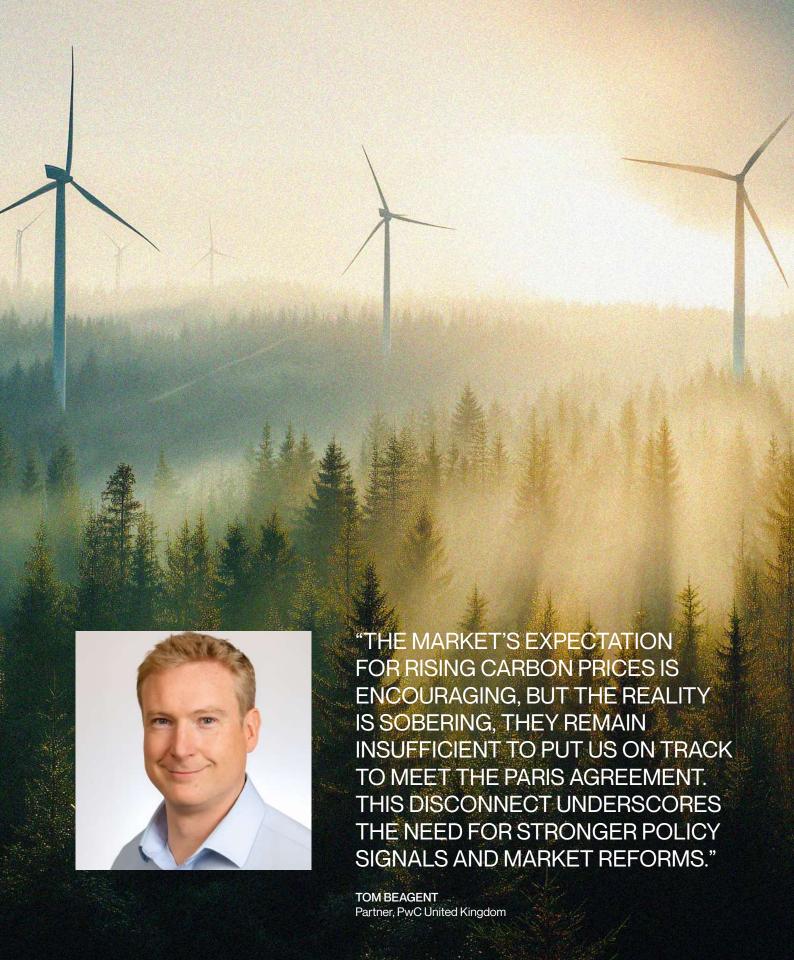
The rise of carbon border adjustment mechanisms (CBAM) adds another dimension, as do the responses of many countries in setting up their own emissions markets. These new markets will not only blunt the impact of CBAMs, but they will also contribute to new nationally determined contributions (NDCs) to the Paris Climate Agreement.

Carbon crediting markets show signs of significant improvement, given the progress of the ICVCM and the establishment of the Article 6.4 mechanism (known now as "PACM"). But the sentiment is still cautious. Trust is hard to restore. Respondents indicate that it may take time to restore the trust and confidence needed to accelerate market growth. But there are positive signs of market convergence around high integrity credits – and the expectation of premium prices.

While there is cautious optimism across both compliance and voluntary markets, it seems that market sentiment for reaching net zero at the Paris goals of 1.5°C to 2°C is doubtful given the current geopolitical dynamics.

In contrast, it is encouraging to see that the survey's most positive message is the turnaround in confidence in Article 6 markets – as 91% of respondents see Article 6 as a key driver of future climate action. After the breakthrough agreement at COP 29 last year in Baku, the commitment to action is rebuilding – and we can take this as a signal that business is ready to engage more in international markets as governments set their sights higher.

DIRK FORRISTERIETA CEO & President



ABOUT THE SURVEY

THE SURVEY HAS BEEN SHARED WITH IETA MEMBERS, OF WHICH, **28%** CONSTITUTE OBLIGATED ENTITIES UNDER A CARBON PRICING MECHANISM AND **63%** HAVE BEEN ACTIVE IN CARBON MARKETS FOR OVER 10 YEARS. WE RECEIVED RESPONSES FROM **143** IETA MEMBER REPRESENTATIVES FROM A BROAD RANGE OF LOCATIONS AND ORGANISATIONS. MULTIPLE RESPONSES WERE PROVIDED BY SOME MEMBER COMPANIES.

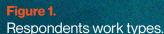
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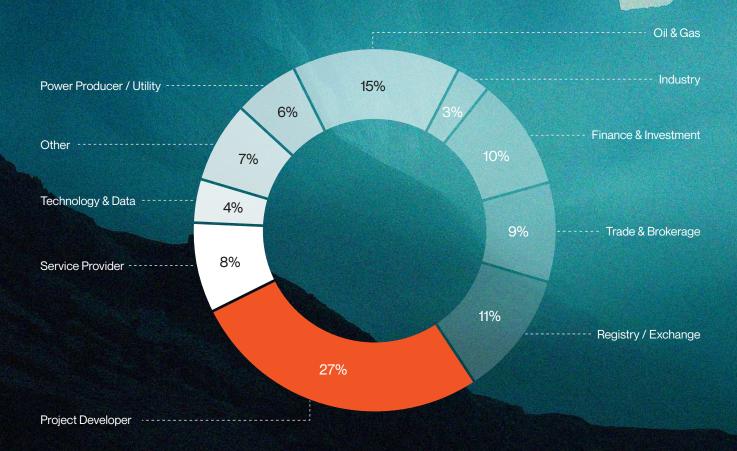
SURVEY RESPONSES 28%

OBLIGATED ENTITIES UNDER A CARBON PRICING SCHEME

63%

ACTIVE FOR 10+ YEARS

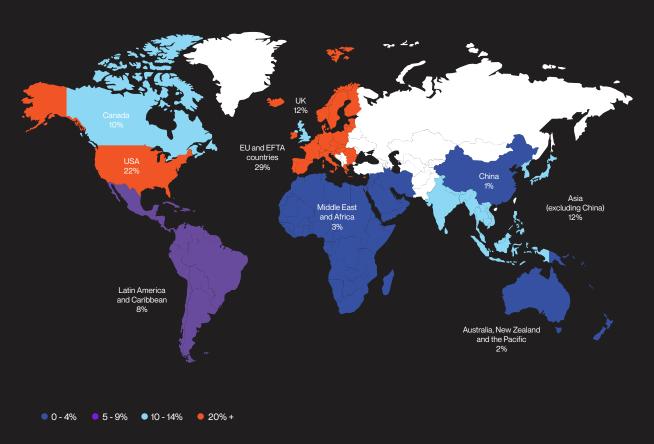




FOLLOWING THE CONVERGENCE OF GLOBAL CARBON MARKETS OVER THE PAST TWO YEARS, THE 2024-2025 IETA GREENHOUSE GAS (GHG) MARKET SENTIMENT SURVEY HAS BEEN STRUCTURED TO FOCUS ON TOPIC-LED DISCUSSIONS INSTEAD OF THE REGIONAL APPROACH ADOPTED IN PREVIOUS YEARS. SIX KEY TOPICS HAVE BEEN SELECTED TO FEATURE IN THIS REPORT AS THE MOST RELEVANT TO CARBON MARKETS IN THE PAST TWO YEARS. THE SELECTED TOPICS REPRESENT THE KEY REGULATORY, VOLUNTARY, AND MARKET-DRIVEN FORCES SHAPING GLOBAL CARBON PRICING AND EMISSIONS TRADING. THE SIX TOPICS AND SECTIONS ARE AS FOLLOWS:

O1 ETS	02 CBAM
03 CORSIA	04 ARTICLE 6
05 VCM	06 PRICE PROJECTIONS

Figure 2. Which of the following best describes your location?



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EMISSIONS TRADING SYSTEMS (ETS)

OVERALL SENTIMENT REFLECTS RESERVED CONFIDENCE. WHILE RESPONDENTS BROADLY SUPPORT THE EXPANSION AND LINKAGE OF NATIONAL ETS, CONFIDENCE IN TIMELINES AND INTEGRATION HAS WEAKENED SINCE 2023. UNCERTAINTY AROUND IMPLEMENTATION AND DESIGN DETAILS PERSISTS, BUT EXPECTATIONS FOR LONG-TERM CONVERGENCE AND INCLUSION OF REMOVALS REMAIN STRONG.

56% OF RESPONDENTS EXPECT A LINK BETWEEN EU ETS AND UK ETS BY 2030 Since 2023, global carbon markets have entered a phase of evolution, with the EU, UK, Korea, China and subnational US schemes announcing plans to expand ETS coverage and explore cross-border linkages. Respondents express growing uncertainty over the pace and direction of this transition: confidence in the integration of ETS2 into the EU ETS (ETS1) market has softened since 2023, and opinions remain divided on the EU's future use of Article 6 credits. Despite this, sentiment remains largely positive, with most respondents expecting a linkage between the EU and UK ETS by 2030 and anticipating gradual inclusion of removals in EU ETS. This indicates cautious optimism that broader cooperation and market maturity will ultimately enhance efficiency and impact.

ETS MARKET EXPANSION

Sectoral expansion is underway across four ETS analysed. The UK ETS is adding upstream oil and gas, maritime transport, and energy-from-waste incineration by 2028¹. The EU has already expanded its ETS to include maritime emissions and will launch ETS2 in 2027 to cover buildings, transport, and small industry. China's ETS, currently limited to the power sector, is preparing to include steel, cement, and aluminium in the coming years. Meanwhile, South Korea's ETS is broadening coverage

to waste, buildings, and parts of the transport sector, alongside tightening caps and allowance adjustments. Overall, all four ETS are progressively widening coverage beyond heavy industry and power.

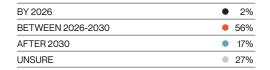
Respondents are divided in their expectations for the integration of EU ETS2 with the EU ETS. Nearly half (46%) believe ETS2 will merge into the ETS1, with 13% expecting this will happen before 2030 and 33% expecting integration after 2030. Only 14% expect no future integration and 40% are unsure. This represents a softening in confidence compared to 2023, when 65% anticipated integration with ETS1 suggesting growing uncertainty around the timeline and feasibility of integration.

MOST RESPONDENTS EXPECT A LINK BETWEEN THE EU AND UK ETS BY 2030

In May 2025 the EU and UK agreed to begin exploring a linkage between their carbon markets. While the details are yet to be defined, 54% of respondents expect a link between EU and UK ETS to come into force between 2026–2030, a small increase from the 48% of respondents in 2023. Such an arrangement is expected to stabilise carbon prices and accelerate emissions reductions in both jurisdictions².

Figure 3.

When do you expect the link between the UK and EU ETS to come into force?



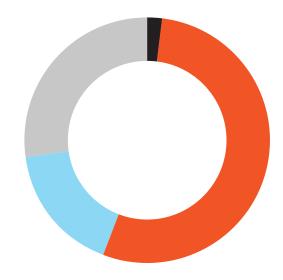


Figure 4.

The European Commission is expected to submit a report to the European Parliament and the Council on how carbon removals could be covered by emissions trading. Would you expect carbon removals to be included into the EU ETS?

YES, I EXPECT THE EU WILL INCLUDE CARBON REMOVALS (ETS1) BY 2030	•	29%
YES, I EXPECT THE EU WILL INCLUDE CARBON REMOVALS (ETS1) AFTER 2030	•	34%
YES, I EXPECT CARBON REMOVALS TO BE INCLUDED IN ETS2	•	6%
NO, I EXPECT THE EU WILL SET A SEPARATE SYSTEM FOR CARBON REMOVALS	•	11%
UNSURE	•	20%



RESPONDENTS ANTICIPATE THE INTEGRATION OF CARBON REMOVALS INTO EU ETS IN THE NEXT DECADE

Following developments over the past two years, sentiment toward the inclusion of carbon removals in the EU ETS has strengthened compared to 2023. This year, 69% of respondents expect carbon removals to be incorporated into the EUETS in some capacity, up from 61% in 2023. Of this group, the largest share of respondents (34%) believes the integration of removals will be after 2030, 29% before 2030, and 6% in ETS2. Only 11% believe a separate system will be established, while 20% are unsure. Comments indicate that while confidence in eventual integration is growing, respondents largely expect a phased and selective approach, focused initially on engineered removals such as carbon capture and storage, with nature-based removals expected to face stricter limitations due to concerns over permanence and measurement reliability.

The integration of carbon removals within ETS remains a live debate. The UK has committed to including Greenhouse Gas Removals (GGRs) in UK ETS by 2029³, while the EU signalled similar intent and plans to present a detailed proposal mid-next year.

RESPONDENTS DIVIDED ON THE EU'S FUTURE USE OF ARTICLE 6 CREDITS

Respondents are divided on the European Commission's proposal to allow up to 3% of the EU's 2040 emissions target to be met through Article 6 credits. Only 9% of respondents see 3% as an appropriate volume, 64% believe the share should be higher and only 6% believe the figure should be lower. Comments also suggest the proposed level is too conservative, with calls for greater ambition, clearer methodology, and stronger alignment with mitigation integrity. Overall, respondents support inclusion of Article 6 credits but stress that the design and calibration of the mechanism will determine its credibility and impact.

HIGH UNCERTAINTY REMAINS ON TIMELINES OF FUTURE NATIONAL ETS UPTAKE

2024–2025 has witnessed acceleration in global ETS uptake, most notably with Vietnam beginning a pilot ETS scheme in 2025 ahead of a 2029 launch.

Despite recent advancements, there is significant uncertainty amongst respondents over when they believe surveyed countries would fully operationalise a national ETS, with 49-69% of respondents unsure of timelines depending on the country. However, of those expressing a specific expectation, Taiwan, Vietnam and Chile emerge as most likely to implement an ETS by 2027. Although the USA is already partly covered by two existing regional ETS, namely the Regional Greenhouse Gas Initiative (RGGI) and the Western Climate Initiative (WCI), respondents widely see the USA as unlikely to implement a national ETS before 2033, with multiple respondents citing federal limitations as barrier to a national ETS ever being implemented. Compared with 2023, expectations for ETS implementation across Asia-Pacific shifted further out. Fewer respondents now expect near-term adoption (before 2027), with most anticipating full operationalisation between 2027 and 2033. While Malaysia and Vietnam remain as leading candidates, timelines have lengthened overall, indicating waning short-term optimism about national ETS rollouts.

Despite anticipated delayed timelines for new schemes, existing schemes are advancing toward stricter compliance: China plans to impose absolute caps for some industries beginning in 2027 ahead of transitioning to a nationwide absolute cap system by 2030, and Japan's GX League is expected to transition to mandatory compliance by 2026.

FOLLOWING
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Figure 5. When do you expect the following countries to fully operationalise a national ETS?

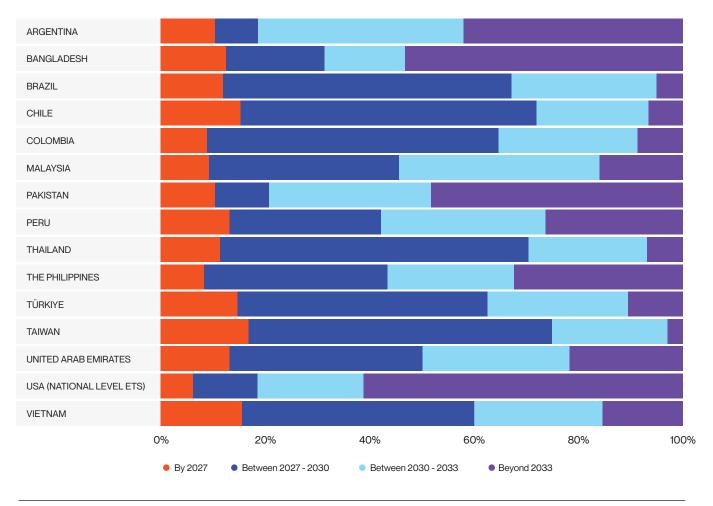
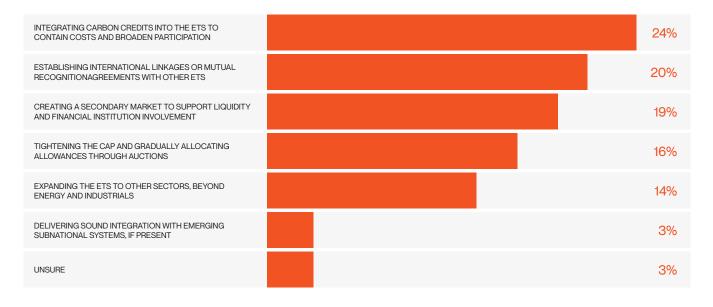


Figure 6.
What do you believe are the conditions for ensuring the long-term success of ETS?





THIS YEAR, 69% OF RESPONDENTS EXPECT CARBON REMOVALS TO BE INCORPORATED INTO THE EU ETS IN SOME CAPACITY, UP FROM 61% IN 2023. Over half of respondents (51%) are unsure of the proportion of China's allowances that will be auctioned by 2035, indicating significant uncertainty about future market design. Among those who expressed a view, the largest share (11%) expects 10–20% of allowances to be auctioned, with smaller proportions anticipating higher or lower levels.

OUTLOOK

Across 2024–2025, ETS have strengthened their position as a central decarbonisation mechanism. Advanced systems are broadening sectoral scope, emerging markets are maturing toward

compliance, and global uptake is accelerating despite sentiment anticipating slower timelines than in 2023.

Respondents are divided over the key future conditions required to ensure the long-term success of an ETS. 24% of responses view integrating carbon credits as a key condition, while 20% suggest creating international linkages with other ETS, and 19% identify the creation of secondary markets to support liquidity. Comments highlighted the importance of cost-effectiveness and CBAM alignment for building a more efficient and connected carbon market.

WHILE CHALLENGES REMAIN, SENTIMENT POINTS FIRMLY TOWARD ETS BEING A KEY PILLAR OF GLOBAL CLIMATE POLICY.

BUILDING CONSUMER AFFORDABILITY INTO ETS: THE CASE OF CALIFORNIA

In September 2025, California passed bills extending its Cap-and-Invest system until 2045. Upon signing the bills, Governor Newsom delivered remarks emphasising additional measures on cost containment and minimising consumer burden. California's example illustrates how to maintain popular support and political viability for an ETS amidst affordability concerns and a general retreat from climate ambition.

California is transitioning free allocation of allowances from natural gas companies to electrical distribution companies, in a bid to pass more of the cost relief onto consumers. The California Air Resources Board (CARB) is now required to consider the cost impact of Cap-and-Invest while deciding

on industrial allocation of credits. The extension laws removed a previous requirement for a declining cap adjustment factor. CARB is empowered to adjust the Allowance Price Containment Reserve (APCR) trigger and price ceiling to better protect consumers. Previously, both were on a fixed escalation path, increasing by 5% a year plus inflation. California's updated ETS introduces several measures to directly assist consumers and ratepayers. A longstanding feature of California's ETS is the California Climate Credit, which is funded through allowance auctions and provides a rebate on electricity bills for most residential consumers. Savings from the credit will be made more explicit on customer bills so that there is a clear mental association between the Cap-and-Invest program and cheaper electricity. Under the extension, the credit must be available to small businesses and emissions-intensive trade-exposed retail consumers as well.

BUILDING INDONESIA'S CARBON MARKET: THE CASE STUDY OF INDONESIA

In 2023, Indonesia made headlines as the first country in Southeast Asia to launch a nationwide mandatory ETS. Currently, the ETS exclusively applies to the power sector, and only large coal and gas-fired power plants are required to participate. The system uses intensity-based caps and firms with excess emissions above the cap must purchase allowances from other companies or buy offset credits. The market price for allowances is low, at around US \$0.76/tCO₂e. While Indonesia's ETS is still in its infancy, the government is working to increase market activity and the price of carbon. There are plans to extend the ETS to other emissions-intensive sectors such as cement, fertilisers, and steel, which would increase the demand for allowances and credits. The system will transition to a hybrid ETS/carbon tax where compliance entities can pay a tax to account for emissions above the intensity limit instead of purchasing allowances or

credits. If the tax is set above the market price of allowances, it could serve as an incentive to participate in the market. Sanctions for outright non-compliance include significant reductions in allowance allocation for the following compliance period.

Alongside developing the ETS, Indonesia is building robust carbon market infrastructure to support the transaction of both ETS allowances and Verified Carbon Credits (VCCs). Indonesia developed its own registry system, Sistem Registri Nasional (SRN), which tracks details like vintage, retirement, and cancellation. The Indonesian Stock Exchange (IDX) launched a secondary market for carbon credits and allowances known as IDXCarbon, where international credit buyers and financial investors can participate in the carbon market alongside compliance entities. The Financial Services Authority, OJK, is responsible for regulating the IDX-Carbon market and preventing fraud.

CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

ATTITUDES REMAIN OPTIMISTIC THAT EU CBAM WILL PROTECT EU COMPANIES FROM CARBON LEAKAGE. THE RECENT CHANGES THE EU HAS MADE, TIGHTENING ANTI-CIRCUMVENTION RULES AND REDUCING THE ADMINISTRATIVE BURDEN OF CBAM, ARE IN LINE WITH RESPONDENTS' VIEWS ON THE MAIN CONSIDERATIONS FOR ENSURING THE LONG-TERM SUCCESS OF CBAM. HOWEVER, DESPITE A CLEAR LEGAL FRAMEWORK, STAKEHOLDERS STILL DOUBT WHETHER THE SALE OF CBAM CERTIFICATES WILL COMMENCE ON TIME.

Currently the EU is the only major jurisdiction to have implemented an operational CBAM, with a UK CBAM proposed to become operational in 2027. The EU CBAM has been in its transitional phase since October 2023. This is scheduled to end in December 2025 when it will enter its definitive phase where importers must purchase CBAM certificates to cover carbon prices shortfalls and CBAM reports will have to be third-party verified. In 2025, the EU shifted the start of CBAM certificate sales from January 2026 to February 2027.⁴

These changes highlight uncertainty around market mechanisms with the timeline and scope of EU CBAM being reshaped. Additional uncertainty is brought by areas such as simplification measures to ease administrative burdens and potential setbacks from challenges such as Russia formally initiating a dispute process at the World Trade Organization (WTO). This section draws on survey responses to assess how stakeholders view CBAM's effectiveness, risks, and long-term prospects.

UNCERTAINTY EXISTS ON THE PROPOSED TIMELINES FOR THE COMMENCEMENT OF EUCBAM CERTIFICATE SALES

This uncertainty is reflected in the survey responses where respondents indicate that they are not convinced the EU will keep to this timeline, as only 23% anticipate CBAM certificate purchases

will commence in February 2027. 37% of respondents expect CBAM certificate purchases to commence after 2027, and 38% are unsure when purchases will commence. While only 2% believe purchases will never commence, such responses highlight the high degree of uncertainty that organisations are feeling over both the timelines and obligations of EU CBAM.

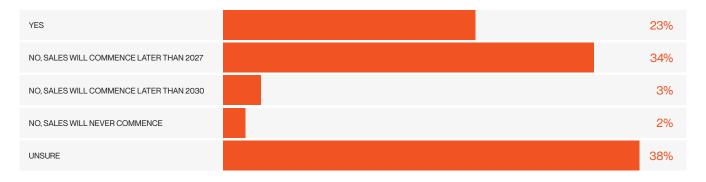
CBAM REPORTING COMPLEXITIES ARE THOUGHT TO BE THE LEADING CAUSE OF LOW REPORTING COMPLIANCE IN 2024

EU CBAM has faced several challenges during its early implementation. The first reporting period (in January 2024) saw very low compliance with some member states reporting compliance as low as 10% among eligible firms with reporting obligations⁵.

Exploring this further in the survey, over half of survey respondents feel the leading cause of low reporting compliance just after the system had been launched was either (i) companies requiring more time to build up reporting capacity to comply with requirements (34%), or (ii) companies choosing not to invest in compliance as they believe that the definitive phase will be significantly delayed or the scope altered (23%). The responses reflect a high degree of uncertainty in the implementation of EU CBAM.

ONLY 23% OF RESPONDENTS BELIEVE CBAM CERTIFICATE PURCHASES WILL BEGIN AS PLANNED IN FEBRUARY 2027 — A CLEAR SIGNAL OF UNCERTAINTY AROUND THE EU'S IMPLEMENTATION TIMELINE.

Figure 7. In 2025, the EU decided to postpone the launch of CBAM certificates sales from January 2026 to February 2027. Do you anticipate the sale of CBAM certificates will commence on track in February 2027?



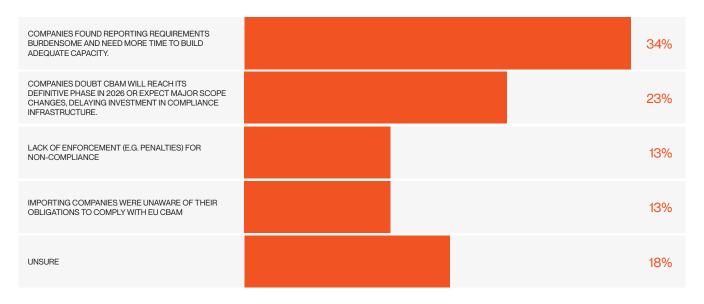
84% OF SURVEY RESPONDENTS BELIEVE

THAT EU CBAM WILL EITHER BE VERY OR SOMEWHAT EFFECTIVE AT PROTECTING EU COMPANIES AGAINST CARBON LEAKAGE.



Figure 8.

After the first EU CBAM reporting period ended on 31 January 2024, the majority of eligible companies failed to comply with reporting requirements. What do you think was the leading cause of the low compliance in EU CBAM reporting in 2024?



Secondly, Russia formally initiated WTO dispute process in May 2025 against EU CBAM, arguing that it conflicts with WTO rules and protects EU industries under the guise of climate change⁶. While the dispute remains outstanding, the impact of Russia's legal challenge on EU CBAM implementation timeline and the scheme overall remains unclear.

Reflecting this, respondents are largely mixed on the impact of Russia's legal challenge on the CBAM's implementation timeline. 42% of respondents believe the challenge will not cause delay, whereas 40% anticipate that it will. Of this 40%, 9% believe it will be due to the challenge itself, 19% suspect it will occur as other countries join Russia's challenge and 12% that the WTO will rule in favour of Russia's challenge.

THERE IS UNCERTAINTY OVER THE FUTURE ROLE OF HEDGING INSTRUMENTS IN REDUCING EXPOSURE TO CBAM PRICE VOLATILITY

Under the updated design, CBAM certificate liability will be tied directly to the EU ETS allowance price – aligning importers' carbon exposure with the EU carbon market. Given this linkage, many market participants anticipate importers will seek hedging strategies to manage volatility and budget for future carbon costs. However, design of hedging instruments, recognition of non-EU carbon price systems and how free allocations in the EU ETS will be adjusted in CBAM accounting remain uncertain.

42% of respondents are unsure about the role of hedging to reduce EU importers CBAM risk. However, only 12% of respondents feel that importers will not hedge at all. 36% feel that while hedging will occur, it will be limited to less than half of CBAM importers, and 11% feel more than half importers would hedge.

EU CBAM'S IMPACT AND LONG-TERM SUCCESS

The majority of respondents feel that once EU CBAM enters its definitive stage it will be effective with 14% anticipating it will be very effective and 70% anticipating it will be somewhat effective at protecting EU companies against carbon leakage.

The EU continues to refine CBAM to ensure its long-term success. In 2025 it launched a public consultation on including downstream products in CBAM and strengthening anti-circumvention rules. 2025 also saw the EU adopt the "simplification package", designed to ease administrative burdens on smaller importers while keeping nearly all embedded emissions within scope. This introduced a broader de minimis threshold (50 tonnes of goods per importer annually), exempting many smaller importers from direct CBAM obligations and streamlining compliance procedures such as authorisation, emissions calculation and verification.

UNCERTAINTY
PERSISTS NOT
ONLY OVER
CBAM'S LEGAL
CHALLENGES
BUT ALSO HOW
IMPORTERS WILL
HEDGE AGAINST
FUTURE CARBON
PRICE VOLATILITY.

Figure 9.
In May 2025, Russia challenged the EU's CBAM at the World Trade Organisation (WTO). Do you expect that Russia's complaint at WTO will delay the implementation of EU's CBAM?

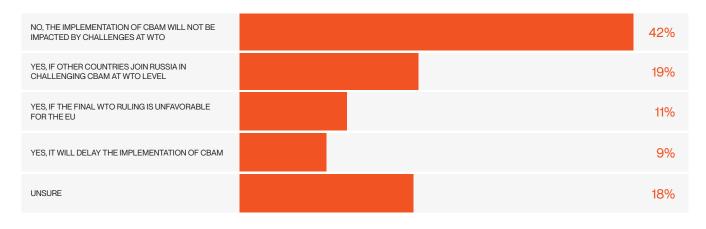
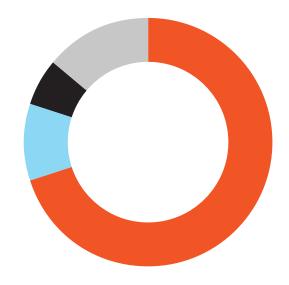


Figure 10.

Once the EU Carbon Border Adjustment Mechanism (CBAM) enters its definitive phase, how effective do you think it will be in protecting EU companies against carbon leakage?



VERY EFFECTIVE	1 4%
SOMEWHAT EFFECTIVE	• 70%
NOT EFFECTIVE	• 10%
UNSURE	• 6%

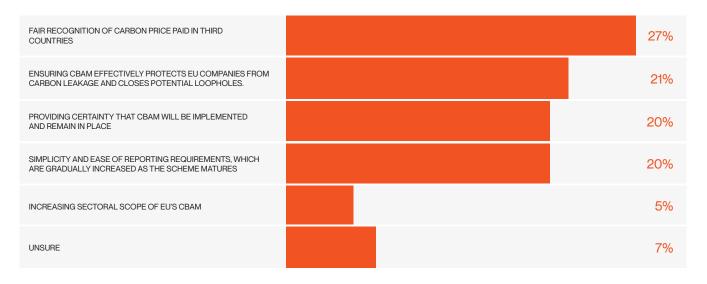
SIMPLICITY, CLARITY, AND FAIR RECOGNITION OF NON-EU CARBON PRICES ARE SEEN AS THE KEY FACTORS FOR CBAM'S LONG-TERM SUCCESS.

While respondents are split over the main conditions for ensuring the long-term success of the EU CBAM, the respondent sentiment is broadly in line with the recent 2025 EU CBAM adjustments. 20% of responses believe simplicity and ease of reporting requirements to be a key factor, and 21% believe that ensuring EU CBAM will provide robust protection for EU companies against carbon-leakage is crucial. 20% of responses feel that providing certainty and clarity to EU companies that EU CBAM will be implemented and remain in place, and 27% feel that fair recognition of carbon prices paid in non-EU countries are additional success factors. However, only 5% of responses feel that increasing CBAM's sectoral coverage will be a key driver of future success.

UNCERTAINTY ON THE FUTURE GLOBAL ADOPTION OF CBAM SCHEMES HAS INCREASED SINCE 2023

Although the EU was the first major jurisdiction to implement a CBAM, its introduction has influenced responses by other countries, most notably in the UK, Australia and Turkey. While uncertainty on implementation timelines remains for both Australia and Turkey as they progress through the design phase, the UK aims to operationalise a national CBAM in 2027. The UK has published draft CBAM legislation that suggests UK CBAM prices will be aligned with UK ETS prices, but that UK CBAM will likely function as a direct import tax as opposed to a market-based mechanism like EU CBAM.

Figure 11.
What do you believe to be the main conditions for ensuring the long-term success of EU's CBAM?



Expectations for the adoption of new CBAM schemes are highly uncertain, with 38-60% of respondents unsure about adoption across surveyed countries. This presents a shift from 2023 sentiment where only 33% of respondents were unsure about the adoption of CBAM by the EU's major trading partners.

Of respondents expressing a specific expectation, Canada is seen as the most likely to establish a CBAM (88%), followed closely by Australia (87%), and Brazil (78%). Canada was seen as most likely to be the first mover, with 70% of respondents expecting coverage by 2030, followed by Australia (54%) and China (46%). Respondents see Taiwan

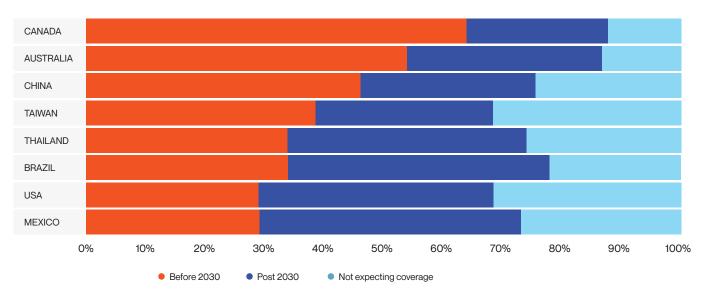
(32%) and the USA (31%) as the least likely surveyed countries to establish a CBAM.

OUTLOOK

Survey responses suggest organisations are highly uncertain around EU CBAM's implementation timeline and are sceptical of investing in compliance due to potential future scope changes. The EU has taken steps to reduce the administrative burden of CBAM and strengthen anti-circumvention rules. Whether these reforms are effective at protecting the EU industry from carbon leakage, and how CBAM may influence international climate and trade policy in the years ahead, remains to be seen.

CANADA AND
AUSTRALIA ARE
VIEWED AS THE
MOST LIKELY FIRST
MOVERS ON CBAM,
WITH OVER 85%
OF RESPONDENTS
EXPECTING
ADOPTION BY 2030.

Figure 12.
Which among the following countries do you expect to establish a Border Carbon Adjustment (BCA) in the near future?



CORSIA

RESPONDENTS EXPRESS MUTED CONFIDENCE IN CORSIA'S ABILITY TO ACHIEVE PHASE 1 COMPLIANCE, WITH THE MAJORITY ANTICIPATING UNDERSUPPLY OF CREDITS BY 2027 AND ONLY A SMALL MINORITY EXPECTING MARKET BALANCE. VIEWS ARE SHAPED BY SCEPTICISM OVER CREDIT AVAILABILITY, FRAGMENTED POLICY ALIGNMENT BETWEEN THE EU AND ICAO, AND WEAK ENFORCEMENT CAPACITY. WHILE RECENT REFORMS IMPROVE TRANSPARENCY AND REDUCE OFFSET DEMAND, SENTIMENT REMAINS CAUTIOUS, MOST SEE CORSIA'S SUCCESS HINGING ON SCALING ELIGIBLE SUPPLY, ENSURING CONSISTENT GLOBAL ENFORCEMENT, AND CLARIFYING LONG-TERM DESIGN TO SECURE PARTICIPATION.

WHILE
REGULATORY
PROGRESS IS
ACKNOWLEDGED
RESPONDENTS
REMAIN CAUTIOUS
ABOUT LIMITED
CREDIT SUPPLY
CLOUDING
CORSIA'S NEARTERM OUTLOOK

In January 2024, the aviation industry entered the first phase of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), a global mechanism developed by the International Civil Aviation Organization (ICAO) to reduce carbon emissions from international flights through the use of sustainable aviation fuel (SAF) and the purchase of eligible carbon credits. Phase 1 currently covers international flights between the 126 countries that have volunteered to participate for this phase. CORSIA is intertwined with Article 6 implementation as corresponding adjustments are required for credits eligible for CORSIA in order to ensure no double counting between NDCs and aviation-sector targets. The survey results demonstrate that sentiment in relation to the CORSIA scheme is cautious: respondents acknowledge regulatory progress but are concerned about limited credit supply, stricter rules, and slow implementation, reflecting uncertainty over CORSIA's near-term viability and long-term success in terms of curbing emissions from the aviation sector. In 2025, ICAO is assessing programmes for Phase 2 eligibility (2027-2029). This survey was conducted before the outcome of the 2025 assessment was published, and also prior to the October 2025 announcements from some eligible standards about the operationalisation of insurance policies as a

means for some projects to acquire a CORSIA eligible label for their credits. As a result, respondents could not factor these developments into their responses summarised below.

UNDERSUPPLY OF CORSIA ELIGIBLE EMISSION UNITS (EEUS) EXPECTED BY 2027

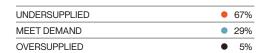
It is anticipated that airlines will require 146-236 million EEUs in the first phase of CORSIA (2024-2026) with the supply of CORSIA-eligible units currently limited to 15.8 million credits made available by Guyana⁷.

Echoing this, 67% of survey respondents that expressed an opinion (i.e. not selecting unsure) anticipate that the market will be undersupplied by 2027, with 28% expecting the market will be able to meet the demand, and only 5% expecting an oversupply. Comments highlight that the main challenges lie not in authorisation itself, but in the lack of Article 6 infrastructure, national registries, and administrative capacity.

Concerns over limited supply find further ground when considering the additional and continued scrutiny on eligible credits from ICAO and the EU. While it remains to be seen exactly what additional limitations the EU may impose, if any, the EU's

Figure 13.

Regarding expectations for additional host countries to authorise units for CORSIA Phase 1, do you expect there to be sufficient available supply by the end of 2027 to meet CORSIA compliance demand?



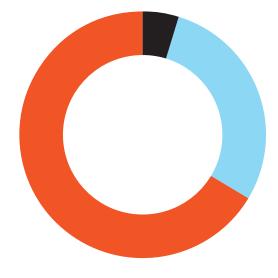


Figure 14.

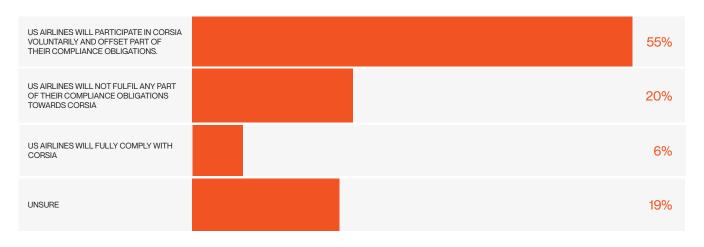
The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is currently in its voluntary phase for 2024-2026. The deadline to retire credits for this phase is 31 January 2028. What is your level of confidence that Phase 1 will conclude with compliance obligations fulfilled as currently scheduled?

VERY CONFIDENT	• 1%
CONFIDENT	26%
NEUTRAL	• 21%
SOME DOUBTS	• 29%
VERY DOUBTFUL	• 14%
UNSURE	9%



Figure 15.

How do you expect US airline companies to participate in CORSIA, given the US withdrawal from the Paris Agreement and absence of legislation implementing CORSIA in the US?



yet to be published criteria for CORSIA eligible units may further restrict the supply of EEUs for EU-based airlines⁸. Additionally, ICAO is currently re-assessing carbon credit programs for eligibility for the 2027-2029 phase, though the outcome of this review is not yet published. Views on how the upcoming ICAO and EU decisions will affect CORSIA eligibility of credits are mixed. Around 26% believe the EU rules will diverge enough to limit credit access for EU airlines, while the same portion said it is too soon to predict policy impacts. Only 13% expect alignment between the ICAO and EU frameworks.

CONFIDENCE IN CORSIA PHASE 1 COMPLIANCE REMAINS MODEST

Confidence in CORSIA compliance obligations being fulfilled as scheduled is modest, with just 27% of respondents feeling confident or very confident that Phase 1 of the scheme will conclude

as planned, and 64% expressing doubt or neutrality. Comments highlight concerns over weak enforcement, slow national implementation, and limited administrative capacity, with several noting restrictive Article 6 rules further hinder CORSIA's effective rollout.

EXPECTATIONS OF FULL CORSIA COMPLIANCE BY AMERICAN AIRLINES ARE VERY LOW

With 126 countries committed to Phase 1, a significant portion of international flights are subject to CORSIA. However, given the US stance in ICAO negotiations, domestic policy context, and absence of legislation compelling airlines to fulfil obligations, the continued role of the US and its airlines is uncertain⁹. 55% of respondents expect US airlines to engage with CORSIA on a voluntary basis and partially comply with their CORSIA obligations. A very low 6% expect full compliance from US airlines.

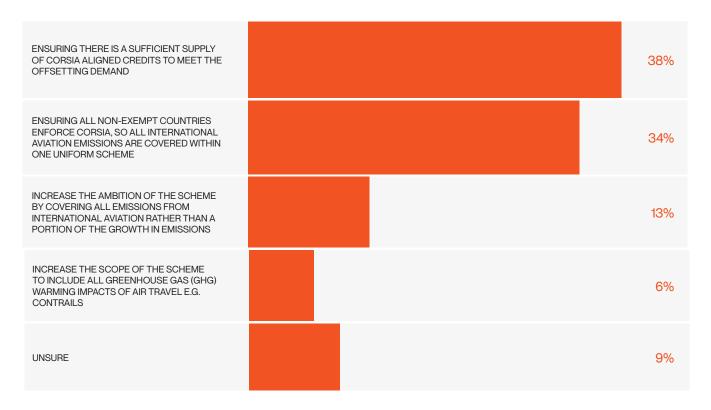
ONLY 6% OF RESPONDENTS EXPECT FULL CORSIA COMPLIANCE FROM US AIRLINES — UNDERSCORING UNCERTAINTY AROUND THE SCHEME'S GLOBAL PARTICIPATION. ENSURING A SUFFICIENT SUPPLY OF ELIGIBLE CREDITS AND CONSISTENT ENFORCEMENT ACROSS ALL NON-EXEMPT COUNTRIES IS SEEN AS KEY TO CORSIA'S LONG TERM VIABILITY

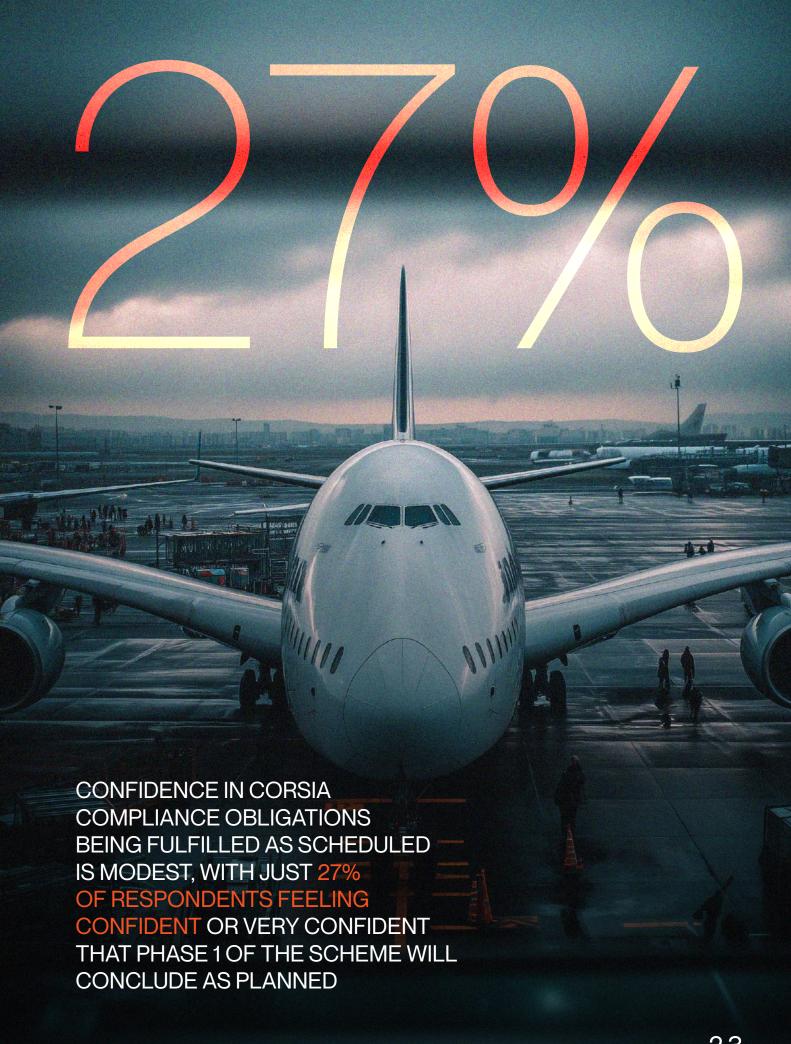
Given ongoing uncertainty in supply-demand dynamics, the outlook for CORSIA Phase 1 compliance and Phase 2 design remains unclear. 38% of responses believe the need to secure a sufficient supply of eligible credits to meet offsetting demand as a key condition for CORSIA's long-term success, while 34% emphasise the importance of consistent enforcement across all non-exempt countries to ensure all international aviation emissions are covered under a single, uniform scheme.

OUTLOOK

CORSIA's first phase has so far seen only one project bring eligible credits to market and limited market activity by airlines to procure eligible units, though this may soon change as insurance mechanisms unlock additional supply. At the same time, increasing international air traffic figures are signalling upward pressure on Phase 1 demand. The outlook for the Phase 1 CORSIA market depends on whether eligible supply can expand fast enough to meet obligations, and on how uncertainties around airline participation and long-term design are resolved.

Figure 16.
What do you believe to be the primary conditions for ensuring the long-term success of CORSIA as a carbon reduction scheme?





ARTICLE 6

CONFIDENCE IN ARTICLE 6 STRENGTHENED IN 2024–2025, WITH 91% OF RESPONDENTS VIEWING IT AS A KEY DRIVER OF CLIMATE ACTION FOLLOWING THE COP29 'PLAYBOOK'. HOWEVER, CONCERNS PERSIST AROUND COMPLEX METHODOLOGIES, LIMITED HOST-COUNTRY CAPACITY, AND WEAK MARKET DEMAND, UNDERSCORING THE NEED FOR GREATER CLARITY AND COORDINATION TO REALISE ITS FULL POTENTIAL.

CONFIDENCE IN ARTICLE 6'S ROLE IN DRIVING CLIMATE ACTION HAS GROWN SHARPLY SINCE 2023. At COP29 in Baku (2024), negotiators finalised the long-awaited "rulebook" for Article 6, setting out the rules to operationalise international carbon trading under the Paris Agreement. The coming years will be critical for further operationalisation of Article 6, providing clarity and structure around robust ITMO authorisation systems, registration of projects, and launching of the Paris Agreement Crediting Mechanism (PACM).

ARTICLE 6 IS EXPECTED TO PLAY A SIGNIFICANT ROLE IN DRIVING FUTURE CLIMATE ACTION

Given the major advances to Article 6 since our previous report in 2023 and the infancy of the mechanism in operation, IETA members were asked to share their views on the role of Article 6 in driving climate action.

Confidence in the role of Article 6 in driving climate action has grown sharply since 2023. This year, 91% of respondents believe it will play a significant role, compared with 45% two years ago. 56% expect its influence to strengthen from the next NDC cycle onward, while 35% anticipate significant impact before 2030. Only 7% expect a negligible impact, citing slow uptake, administrative complexity, and limited political will. Comments suggest growing optimism that, as infrastructure and participation expand among major economies, Article 6 will become a central mechanism for enhancing global climate ambition.

RESPONDENTS ARE SCEPTICAL OF THE FUTURE DEMAND FOR CREDITS TRANSITIONED FROM THE CLEAN DEVELOPMENT MECHANISM (CDM) TO THE PARIS AGREEMENT CREDITING MECHANISM (PACM)

Article 6.4 introduces the PACM, governed by a new Supervisory Body and designed to replace the Kyoto Protocol's Clean Development Mechanism (CDM). Under PACM, Article 6.4 Emission Reductions (A6.4ERs) will be issued against new approved methodologies, with the shift designed to deliver stronger credit oversight and legitimacy. However, the first batch of A6.4ERs is expected to come from existing CDM projects that are allowed to use their old methodologies for the period from 2021 through to the end of 2025. Host countries have until the end of this year to approve the transition of these projects and the issuance of A6.4ERs. Respondents are broadly sceptical about the future demand for these transitioned CDM projects under the PACM. Nearly a third (29%) believe these credits will struggle to find buyers or viable use cases, while a smaller share anticipates their use for NDC compliance, either to achieve the NDC of a buying country (16%) or domestic NDC (17%), or within CORSIA (12%). Only 12% expect uptake for voluntary retirements. Comments point to limited readiness of Article 6 infrastructure, regulatory uncertainty, and a lack of market confidence, suggesting that without clearer frameworks and political alignment, the shift to PACM is unlikely to generate strong near-term demand for CDM projects.

Figure 17.

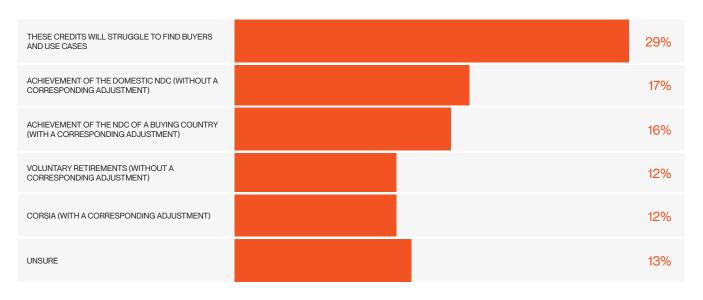
What role do you think Article 6 will play in driving climate action and increasing climate ambition?

IT WILL PLAY A SIGNIFICANT ROLE UP TO 2030		35%
IT WILL PLAY A SIGNIFICANT ROLE, BUT ONLY STARTING FROM THE NEXT NATIONALLY DETERMINED CONTRIBUTION (NDC) CYCLE (2030 ONWARDS)	•	56%
IT WILL PLAY A NEGLIGIBLE ROLE	•	7%
UNSURE	•	3%



Figure 18.

By 31 December 2025, several countries are expected to approve the transition of over 1,000 Clean Development Mechanism (CDM) projects to the Paris Agreement Crediting Mechanism (PACM). These projects may be allowed to use existing CDM methodologies for mitigation up to the end of 2025. What do you think will be the main use case of these credits?



Respondents are also split on who would drive demand for PACM credits once operational. Around a third (32%) expect corporations to be the primary buyers, followed closely by governments at 31%, while fewer foresee participation from banks and financial institutions (15%) or multilateral organisations (5%). However, 17% remain unsure, and comments reveal widespread scepticism about overall market appetite, with some doubting whether any significant buyers will emerge. Overall, sentiment reflects uncertainty and limited confidence in the PACM's ability to attract sustained demand without clearer market signals or stronger compliance drivers.

Tensions also persist around methodology rules. Respondents completed the survey before the adoption of the PACM standard on non-permanence and reversals. At the time, a draft standard produced by the Methodological Expert Panel had been criticised for setting overly stringent requirements. Most respondents opposed the proposed exclusion of landbased activities from the PACM, with 45% warning it would harm mitigation efforts and 28% viewing it as politicised. Only 8% supported the move for integrity reasons. Comments stressed that nature-based solutions are essential for affordable, scalable climate action, and that its exclusion risks undermining impact and investor confidence.

Respondents are largely critical of the operationalisation of the PACM under Article 6.4, describing it as slow, bureaucratic, and overly complex. 30% of responses believe the process is too slow and bureaucratic, 21% feel it imposes unrealistic methodological requirements that threaten project viability. Others point to concerns around demand creation (15%) and the lack of a functioning registry (12%).

DEVELOPING ARTICLE 6 CAPACITY: THE CASE STUDY OF GHANA

Ghana has been a global leader in operationalising Internationally Transferred Mitigation Outcomes (ITMOs) through Article 6.2 of the Paris Agreement. In February 2020, Ghana signed an MoU with Switzerland to develop Article 6 trade between the two countries. In the years since, Ghana has signed similar bilateral agreements with Sweden, Singapore, South Korea, and Liechtenstein. In July 2025, 11,733 ITMOs were transferred from Ghana to Switzerland using credits from an improved cookstove project. This marked the first ITMO transaction from the African continent.

Apart from entering agreements with various buyer countries, Ghana has developed robust infrastructure to support Article 6 projects. Ghana's current NDC specifically mentions Article 6 finance is aligned with UNFCCC requirements. Ghana established a Carbon Market Office (CMO) under its Environmental Protection Agency (EPA) as the Designated National Authority to manage the authorisation, cancellation, and corresponding adjustment of credits. Projects in the CMO pipeline span various sectors, including agriculture, transportation, and waste management.

Through Ghana's NDC and framework of international carbon markets, it is clear how Article 6 aligns with the country's own emission reduction targets. Ghana only authorises Article 6 credits from sectors outside its unconditional target that are NDC-additional. Ghana intends to use Article 6 to cover up to 55% of its conditional emissions reductions through credits that are retained domestically and export revenues.

A LACK OF CLEAR GUIDANCE ON AUTHORISATION AND CORRESPONDING ADJUSTMENTS IS SEEN AS A KEY BARRIER TO ENABLING INTERNATIONALLY TRANSFERRED MITIGATION OUTCOMES (ITMOS)

In January 2024, Switzerland and Thailand completed the first bilateral trade of ITMOs, marking a move from negotiation to action. Progress, however, remains slow; as of July 2025, only a handful of countries (e.g. Ghana, Switzerland and Thailand) have systems in place for authorisation processes and most remain in development¹⁰.

Key barriers to advancing bilateral agreements under Article 6.2 continue to include a lack of clear guidance on authorisation and corresponding adjustments (23%, compared with 20% expressed in 2023), limited technical capacity in host countries (16%, compared with 8%), and uncertainty regarding the interaction between Article 6 and NDCs (15%, compared with 20%). While access to data, technology, and registries was identified by 12% of respondents as a key barrier in previous years, it was cited less frequently in 2025. Additional challenges relate to political commitment and risk management, with respondents highlighting weak engagement from buying countries and limited availability of insurance mechanisms. Overall, progress remains constrained by gaps in clarity, capacity, and coordination required to operationalise bilateral agreements effectively.

Despite no formal negotiations taking place at COP30, the summit is expected to be a milestone in consolidating progress and providing clarity on the role of Article 6 within the context of carbon credits and the wider carbon market. 28% of responses want Article 6 discussions at COP30 to focus on Article 6 and voluntary carbon market interactions, and 22% want a focus on ITMO authorisation and corresponding adjustment rules. Smaller numbers of responses believe discussions should focus on clarifying the link between Article 6 and NDCs (14%) and the role of Article 6 in delivering international climate finance (10%). Only a small share (5%) wants discussions to focus on CDM transition deadlines or revisiting PACM oversight. Overall, respondents emphasised the need for greater clarity, alignment, and governance to be provided at COP30 to strengthen Article 6 implementation.

OUTLOOK

With the Article 6 'rulebook' set in place during 2024/25, the coming years and discussions at COP30 will be critical for operationalising Article 6. Countries and market participants must now establish robust ITMO authorisation systems, register projects, and launch the PACM.

Figure 19.

How well do you think the operationalisation of the PACM under Article 6.4 is going?

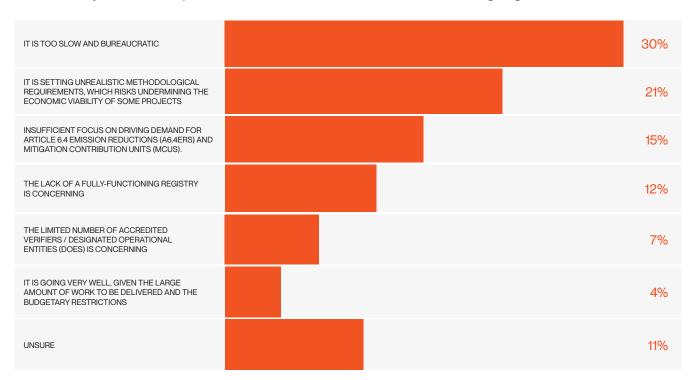


Figure 20.

As of 14 July 2025, there are approximately 100 bilateral agreements under Article 6.2 for the purchase of Internationally Transferred Mitigation Outcomes (ITMOs). However, only a very small number of ITMOs have been transferred so far. From your perspective, what is the primary challenge hindering the issuance and transfer of further ITMOs?

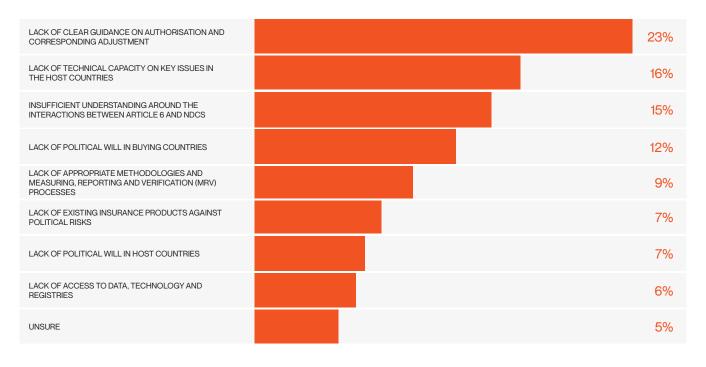
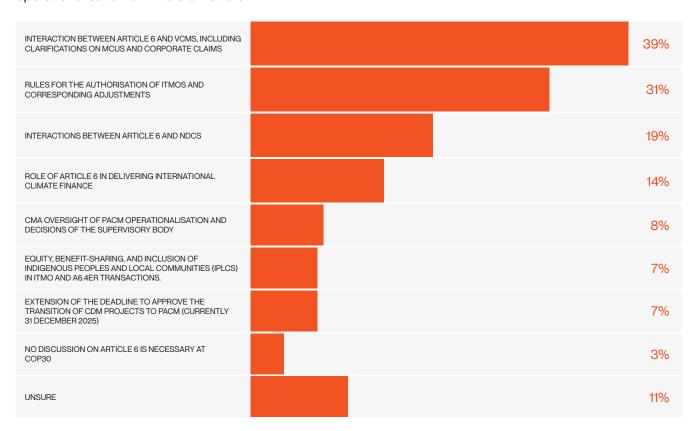


Figure 21.
What key issues / topics do you think need to be discussed more thoroughly at COP30 relating to the operationalisation of Article 6.2 and 6.4?



MOST RESPONDENTS **OPPOSED THE PROPOSED EXCLUSION OF LAND-BASED** ACTIVITIES FROM THE PACM, WITH 45% WARNING IT WOULD HARM MITIGATION **EFFORTS AND 28% VIEWING** IT AS POLITICISED. 28

VOLUNTARY CARBON MARKET

IN 2024–2025, THE VOLUNTARY CARBON MARKET ENTERED A PHASE OF TRANSFORMATION, WITH INTEGRITY, TRANSPARENCY, AND TRUST EMERGING AS CORE PRIORITIES AMID TIGHTENING STANDARDS AND EVOLVING METHODOLOGIES. DESPITE ONGOING UNCERTAINTY AND DECLINING TRANSACTION VOLUMES, RESPONDENTS WERE CAUTIOUSLY OPTIMISTIC THAT STRONGER GOVERNANCE, GROWING ALIGNMENT WITH COMPLIANCE MARKETS, AND RISING DEMAND FOR HIGH-QUALITY REMOVAL CREDITS ARE SIGNALLING A MORE CREDIBLE AND RESILIENT MARKET AHEAD.

Over 2024 and 2025, the voluntary carbon market (VCM) has entered a phase of fundamental change. Concerns that slowed adoption are being addressed through emerging regulatory frameworks such as the ICVCM's Core Carbon Principles (CCPs); increased market oversight, including the expansion of rating agencies and insurance products; and improved digital MRV systems, data standardisation and protocols. This has seen a change in the overall credit mix, with the market shifting away from renewables toward nature and waste-based projects.

Guidance is changing to account for the shift in perception of the VCM, with the Science Based Targets initiative (SBTi) currently in the process of finalising Version 2 of its Corporate Net Zero Standard including several updates around the use of carbon credits. Respondents anticipate the evolving guidance will have a mixed impact on corporate demand for voluntary credits. When asked to select all the answers that apply: 33% of respondents expect it to restrict boundaries on the scope for offsetting within net zero strategies thereby impacting demand; 32% predict it will create uncertainty as companies struggle to keep up with changes whilst navigating the net zero challenge; and 28% predict an increase in demand by providing clearer guidance on how high-integrity credits can be used to meet net zero. Only a small minority (11%) anticipate no impact, suggesting that most respondents expect the SBTi revision to have some impact on the VCM.

REDUCTION AND AVOIDANCE CREDITS ARE EXPECTED TO REMAIN TRADEABLE BUT AT LOWER PRICES OR IN A MORE LIMITED CAPACITY

Despite advances in standards and methodologies, market fundamentals remain turbulent. 2024 was the third consecutive year of declining market value and transaction volumes within the VCM, with issuances down 20% and new project registrations falling 11% when compared with previous years¹¹. Yet credit retirement remains steady, possibly indicating persistent demand even as liquidity tightens¹².

The market mix is also evolving. Removal credits reached 5% of annual traded volume, potentially driven by corporate net zero targets and the inclusion of removals in national carbon pricing systems, such as the UK¹¹. Nature-based removals gained notable price premiums as voluntary buyer preferences shifted toward these credit types as well as clean cooking projects - highlighting evolving market preferences¹³. Transactions of renewable energy credits fell sharply, down 23% in 2024, likely driven by ICVCM assessment outcomes¹².

DESPITE DECLINING
MARKET VALUE
AND TRANSACTION
VOLUMES WITHIN
THE VCM, CREDIT
RETIREMENT
REMAINS STEADY

Figure 22.

As demand in the voluntary carbon market has increasingly prioritised removal credits, how do you anticipate the role and use of reduction / avoidance credits to evolve?

THEY WILL CONTINUE TO BE TRADED IN THE MARKET. BUT AT	
INCREASINGLY LOWER PRICE POINTS THAN REMOVALS	• 43%
THEY WILL GAIN BROADER ACCEPTANCE AS METHODOLOGIES AND MRV IMPROVE. THEY WILL REMAIN A VALID OPTION, BUT ONLY FOR LIMITED USE CASES (E.G. SHORT-TERM OR NON-PERMANENT EMISSIONS OFFSETTING)	• 32%
THEY WILL BE INCREASINGLY RESTRICTED OR EXCLUDED FROM HIGH-INTEGRITY MARKETS AND CLAIMS FRAMEWORKS, AND REPLACED BY REMOVALS CREDITS	• 17%
UNSURE	• 8%



Figure 23.

Some observers believe that the PACM and independent standards will increasingly converge in the future so that they can serve a variety of compliance and voluntary market needs. Do you think that convergence of the VCM and compliance markets is necessary for carbon market longevity?

YES	• 56%
NO	18%
UNSURE	2 6%



75% OF RESPONDENTS BELIEVE THE VCM WILL BE ABLE TO MEET THE DEMAND FOR CARBON CREDITS TO MEET NET ZERO TARGETS BY 2030 As demand shifts toward removal credits, 43% of respondents expect avoidance credits to remain tradable but at lower prices or in more limited applications. Comments strongly opposed the growing bias toward removals, arguing that avoidance credits are critical for immediate, scalable impact, while removals remain costly, scarce, and operationally uncertain. Many respondents expressed that over-prioritising removals could destabilise markets and slow near-term decarbonisation progress and instead call for a balanced approach that values both credit types.

VCM INTERACTION WITH DOMESTIC AND INTERNATIONAL COMPLIANCE MARKETS

56% of respondents believe convergence between the Paris Agreement Crediting Mechanism (PACM) and independent standards is essential to strengthen integrity, reduce double counting, and improve market scalability through greater standardisation and simplicity. However, 18% disagreed, arguing that the two serve distinct purposes - the PACM as a compliance tool and the VCM as a voluntary space for broader corporate action. Respondents viewed full convergence as unrealistic or unnecessary, citing concerns over PACM's limited flexibility, UN governance, and uneven global participation, though some acknowledged methodological alignment could still be beneficial.

How the VCM interacts with compliance markets, as well as with Article 6, is yet another major channel of discourse around the VCM. VCM convergence with compliance markets is advancing, with the UK, Kenya, and Singapore launching a Coalition to Grow Carbon Markets to expand high-integrity credit use. 42% of respondents believe such government-led initiatives will strengthen the VCM by enhancing integrity, trust, and demand, while others (24%) saw potential short-term complexity but long-term benefit. Comments reflected cautious optimism, noting that success will depend on the Coalition's ability to align with existing standards and establish clear, interoperable rules, rather than introducing new layers of regulation.

CREDITS THAT DO NOT MEET CCP QUALITY THRESHOLDS ARE EXPECTED TO LOSE MARKET VALUE, COMPARED TO CCP CREDITS

75% of respondents believe supply of carbon credits for the VCM will be able to meet the demand from companies attempting to meet their net zero targets by 2030. This is consistent with sentiment in 2023 when 71% of respondents believed supply of credits for the VCM would be able to accommodate increased demand. However, respondents are split on the supply ability to meet the demand with high quality credits for voluntary purposes. 22% of respondents believe the supply of carbon credits for voluntary purposes will be able to meet demand with high quality credits, but over half of respondents (53%) believe supply will meet demand, but not all credits will reach the new integrity standards being set. Only 10% of respondents expect potential future supply shortfalls. Comments highlight concerns that stricter integrity standards may slow credit issuance and constrain supply, with several noting that integrity alone will not drive demand. Respondents call for greater market credibility, pricing stability, and balanced recognition of both reduction and removal credits to maintain growth and accessibility.

33% of respondents believe the release of CCP-eligible credits has had a limited impact on the market so far as participants are still assessing how to respond. The remaining responses are mixed, with 19% of respondents observing rising demand from corporates, and 15% observing emerging price differentiation between CCP and non-CCP. 13% of respondents point towards increased buyer caution, as organisations reassess their credit portfolios and await clearer guidance on CCP labeling. Some commentors note that demand is rising but price premiums are yet to materialise.

As the outcomes of the CCP assessments continue to be released, respondents expect credits that fail to meet CCP quality thresholds to lose market standing, with 32% predicting they will still trade but at a discount and for limited use cases, and 26% expecting them to become increasingly difficult to sell or use credibly. A smaller share (17%) believe uncertainty will persist until clearer policy direction emerges. Overall, sentiment suggests a market shift toward quality differentiation, where non-CCP credits may retain some liquidity but will likely face reduced demand and lose credibility over time.

OUTLOOK

When asked to identify the most significant challenges the VCM will need to overcome to increase credit demand, 29% of responses pointed to uncertainty around corporate claims and the permissible use of credits towards net zero targets as the most significant challenge. 23% of responses highlight public perception and negative press coverage, and 13% list ambiguity around interaction with Article 6 of the Paris Agreement (especially in relation to double counting and corresponding adjustments), followed closely by credit quality.

Overall, although the VCM still has areas of improvement and barriers to address, the direction the market is going in terms of supply-side integrity, is promising. The overriding challenge on the demand side remains the need for clarity on the use cases for carbon credits. The global carbon credit supply could grow 20 to 35-fold by 2050¹⁴ from today's levels, catalysed by a market reset that focuses on integrity and impact.

Figure 24.

Do you think that with increased integrity and credit quality standards, carbon projects can provide the supply of credits required to accommodate demand from companies trying to achieve their net zero commitments by 2030?

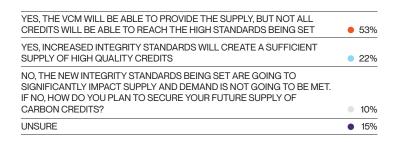




Figure 25.

What early effects, if any, are you observing in the market following the release of the first Carbon Crediting Program (CCP)-eligible credits?

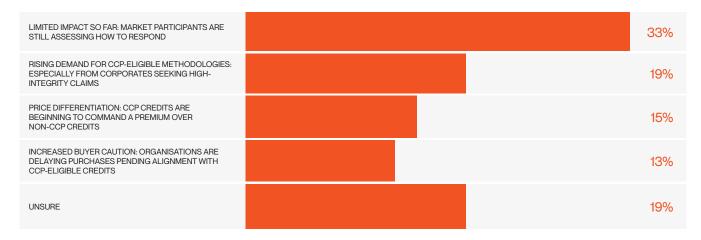


Figure 26.

As the outcomes of the CCP assessments continue to be released, what do you think will happen to credits that do not meet the quality threshold and are therefore not 'CCP-approved'?

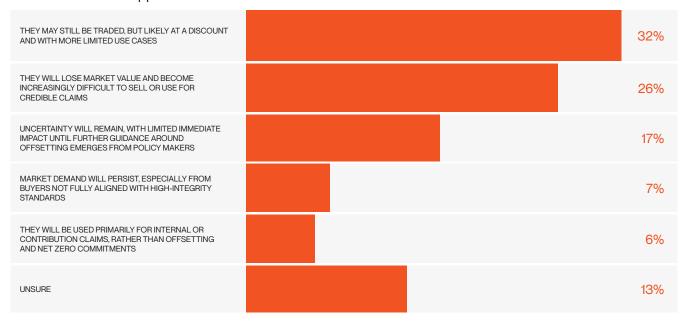
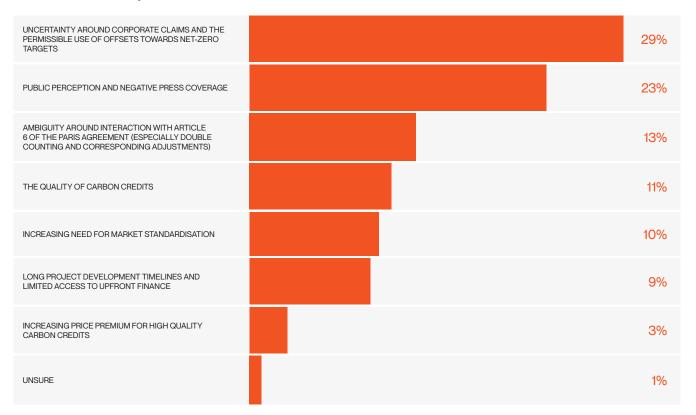


Figure 27.

What are the three most significant challenges in the Voluntary Carbon Market (VCM) today that need to be overcome in the near future in order to increase demand for voluntary use of carbon credits?





CARBON PRICE PROJECTIONS

SENTIMENT TOWARDS FUTURE CARBON PRICES REMAINS BULLISH DESPITE FALLING AVERAGE PRICES IN THE VOLUNTARY AND SOME COMPLIANCE MARKETS IN 2024. LOWER PRICES HAVE REDUCED CONFIDENCE IN THE SCALE OF PRICE INCREASES EXPECTED IN COMPLIANCE MARKETS WITH ALL PREDICTIONS LOWER THAN PREVIOUS SURVEY RESULTS IN 2023 AND 2022. IN THE VOLUNTARY MARKET, PRICES ARE EXPECTED TO INCREASE BY 2030, DRIVEN BY ALIGNMENT WITH ARTICLE 6 AND NATIONAL ETS. SUPERIMPOSED ON THIS TREND, THE PRICE PREMIUM OF HIGH-QUALITY CREDITS IS EXPECTED TO CONTINUE TO INCREASE TO 2030.

WHILE EXPECTATIONS FOR ETS PRICE GROWTH REMAIN POSITIVE, PROJECTIONS FOR 2025–2030 ARE NOW 18–29% LOWER THAN IN LAST YEAR'S SURVEY.

RESPONDENTS REMAIN OPTIMISTIC ABOUT PRICE GROWTH IN GLOBAL ETS SCHEMES TILL 2030, BUT EXPECTED PRICES HAVE REDUCED SINCE 2023

2024 saw a mix of pricing trends observed across different ETS schemes. Average prices fell in many major schemes from 2023 values: EU ETS (-23%), UK ETS (-28%), and South Korean ETS (-21%). Conversely, prices rose in the Chinese National ETS (42%) and in the regional North American schemes: Regional Greenhouse Gas Initiative (RGGI) (53%) and Western Climate Initiative (WCI) (11%). Although prices in the Chinese National ETS, RGGI and WCI are still significantly below those in the UK and EU ETS.

Despite these trends, respondents expect prices to increase from 2024 across all surveyed ETS, both in 2025-2027 and 2028-2030. However, respondents have become more cautious in the predicted scale of price increases since 2023, with average expected prices for 2025-2030 between 18-29% lower for every ETS included in the survey than expected in 2023 for 2026-2030, see Figure 28 (the most representative time surveyed in 2023).

Consistent with the 2023 survey, the EU and UK ETS have the highest expected average carbon prices across both 2025-2027 and 2028-2030, with prices expected to reach €82/tCO₂e for the

NOTE: All ETS average price data was taken from the ICAP Allowance Price Explorer

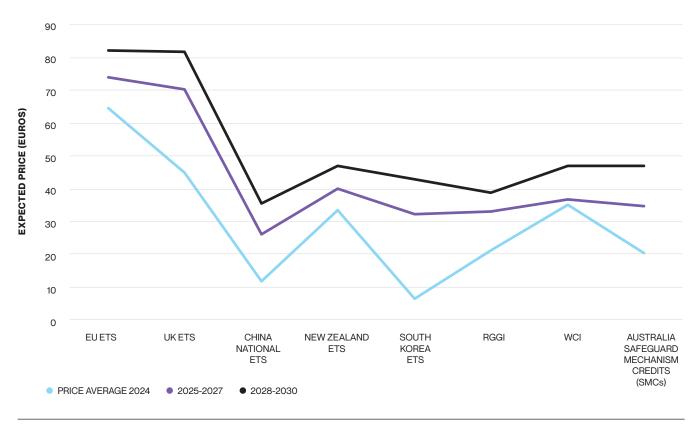
Figure 28.

Comparison of ETS price projections from the last three market sentiment surveys.



Figure 29.

Comparison of respondent ETS price projections for 2025-2027 and 2028-2030 with average actual ETS prices from 2024.



period 2028-2030 in both systems. However, while this represents a large increase on 2024 average prices, €65/tCO₂e and €45/tCO₂e for the EU and UK ETS respectively (see Figure 29), it is still significantly lower than price predictions in both the 2022 and 2023 surveys (see Figure 28) or peak actual prices observed in both systems (€100/tCO₂e in the EU ETS in February 2023, and €115/tCO₂e in the UK ETS in August 2022).

The South Korean ETS average carbon price is predicted to rise to €32/tCO₂e and €43/tCO₂e in 2025-2027 and 2028-2030, see Figure 27. While this is significantly below the predictions from both the 2023 and 2022 surveys, see Figure 28, it suggests a very bullish attitude to price increases compared to the 2024 average price of €8/tCO₂e.

The Chinese National ETS average carbon prices have increased by 42% from 2023 to 2024. Despite this increase, carbon price predictions for 2025-2027 and 2028-2030 are 36% and 12% lower than the predicted value for 2026-2030 in the 2023 report.

Overall respondents are confident that ETS prices will rise between now and 2030. However, they are increasingly cautious: expected prices are lower across all markets than in the 2023 report and EU and UK ETS prices are not expected to reach previous highs before 2030.

VCM PRICES ARE EXPECTED TO RISE BY 2030, DRIVEN BY INCREASED PRICE PREMIUMS OF HIGH-INTEGRITY CREDITS

Following rapid growth between 2020 and 2022 to a peak of €6.4/tCO₂e, 2024 marked the second consecutive year of declining average prices for voluntary carbon credits to €5.5/tCO₂e. Superimposed on this decline in price is a growing price premium on removal credits, with removal credits 381% more expensive than avoidance credits in 2024, up from 245% in 2023.

Despite the recent trend of falling prices, 70% of respondents expect VCM prices to rise either moderately (51%) or significantly (19%) by 2030, with only 9% anticipating a decrease. Comments suggested that while prices are expected to rise on average, it is anticipated this will be driven by price premiums on high integrity credits, (e.g. CCP, Article 6 or CORSIA approved credits) with low quality credit prices continuing to fall.

Respondents are currently divided over the price premium an Article 6 carbon credit would be able to command in 2030, with an average premium expected of €20.4/tCO₂e. This is an increase in the premium expected in the 2023 survey of €17.3/tCO₂e and further highlights the growing senti-

RESPONDENTS
EXPECT AN
ARTICLE 6
ALIGNED CREDIT
TO COMMAND A
PRICE PREMIUM
OF €20.4/tCO₂e BY
2030.

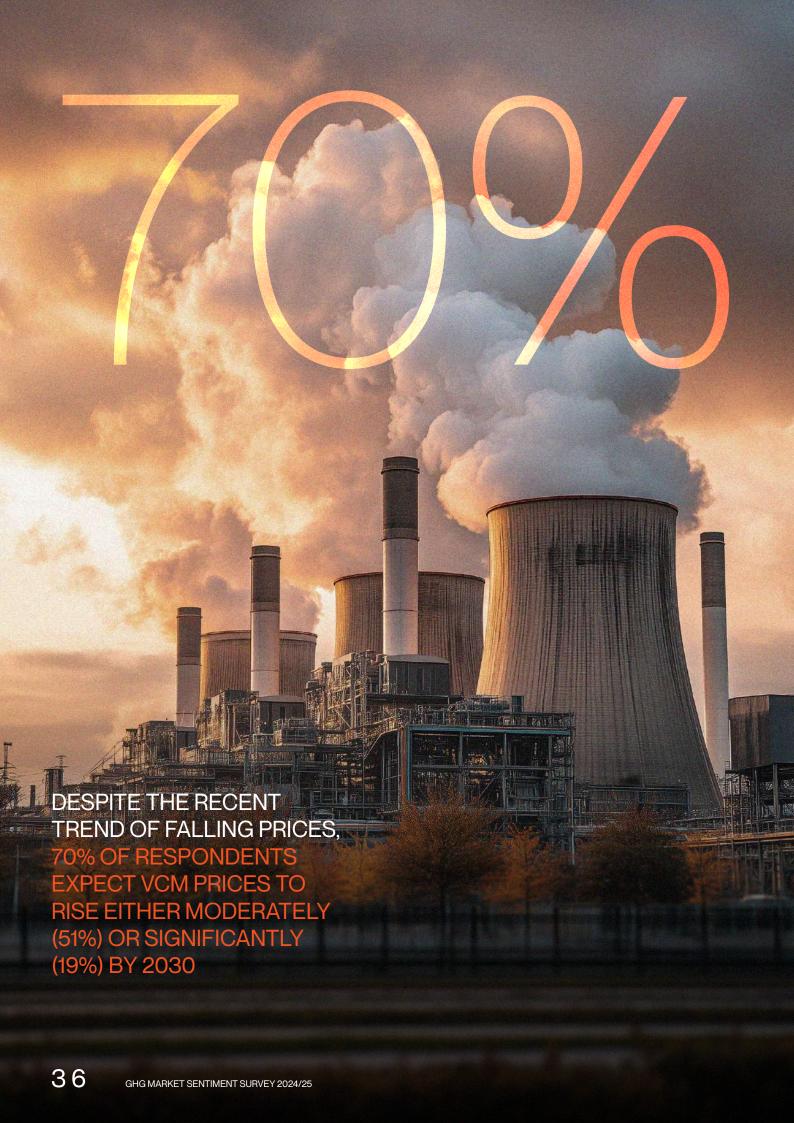
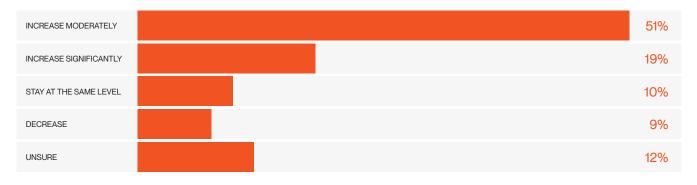


Figure 30.

How do you expect the average VCM credit price to evolve by 2030?



ment of price premiums for high integrity offsets. Looking forward, 36% of respondents believe the biggest driver of future VCM price increases will be alignment with regulatory frameworks such as Article 6 and national ETS. Lower proportions of respondents feel increased corporate demand for credits (22%), market standardisation and improved credit integrity (13%), and future standard development (10%) will be key future drivers of price increases.

OUTLOOK

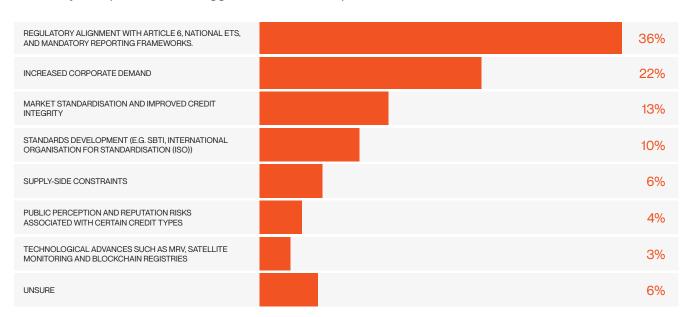
Despite average prices falling in 2024 for the VCM as well as in the EU, UK, South Korea, and New Zealand ETS; respondents maintained optimistic sentiment about future price rises.

Respondents anticipate that, by 2030, the average global carbon prices required to meet the 1.5°C and 2°C goals are €125/tCO₂e, and €85/tCO₂e, respectively. Carbon prices at these levels are necessary to achieve the 1.5°C and 2°C goals by providing sufficient incentive to companies to decarbonise at the required rates. While there has been a significant decrease in the expected price to achieve both the 1.5°C and 2°C goals since the 2023 report, €145/tCO₂e and €118/tCO₂e respectively, average carbon prices are significantly below these values in both voluntary and compliance markets.

Respondents do not expect average prices to reach these levels in any surveyed ETS for 2028-2030 with comments suggesting the 1.5°C goal was no longer achievable, and the carbon prices required to meet the Paris targets are incompatible with current economic and energy security needs.

RESPONDENTS
ANTICIPATE
AVERAGE GLOBAL
CARBON PRICES
OF €125/tCO₂e AND
€85/tCO₂e WILL BE
REQUIRED TO MEET
THE 1.5°C AND 2°C
PARIS GOALS.

Figure 31.
What do you expect to be the biggest driver of future price in the VCM?



APPENDICES

Table 1: By 2030, what global carbon price do you believe is needed to meet the 2°C goal?

Year	Median	Mean	Min	Max
2024/2025	€75	€85	€3	€250
2023	€100	€118	€20	€300
2022	€100	€97	€5	€200
2021	€50	€63	€10	€180
2020	€50	€56	€12	€180
2019	€50	€56	€20	€150

Table 2: By 2030, what global carbon price do you believe is needed to meet the 1.5°C goal?

Year	Median	Mean	Min	Max
2024/2025	€135	€125	€6	€300
2023	€120	€145	€28	€600
2022	€100	€124	€5	€500

Table 3: When do you expect the following countries to fully operationalise a national ETS?

Country	Stated ambition / status	Sentiment
Taiwan	Operationalise by 2027-2028	Between 2027 – 2030
Vietnam	Pilot in 2025 ahead of a 2029 launch	Between 2027 – 2030
Chile	Pilot to launch in 2026	Between 2027 – 2030
Turkey	Pilot to launch in 2026	Between 2027 – 2030
United Arab Emirates	N/A	Between 2027 – 2030
Colombia	Phased roll out in 2030	Between 2027 – 2030
The Philippines	Approved a carbon pricing framework in 2025	Between 2027 – 2030
Brazil	Passed a national cap-and-trade law in 2024, with implementation planned within six years	Between 2027 – 2030
Thailand	Thailand is preparing a mandatory market	Between 2027 – 2030
Peru	Exploratory stage	Between 2030 – 2033
Malaysia	Consultation for domestic ETS released in 2024	Between 2030 – 2033
Argentina	Exploratory stage	Beyond 2033
Pakistan	Exploratory stage	Beyond 2033
USA (national level ETS)	Some regional ETS	Beyond 2033
Bangladesh	Exploratory stage	Beyond 2033

SURVEY METHODOLOGY

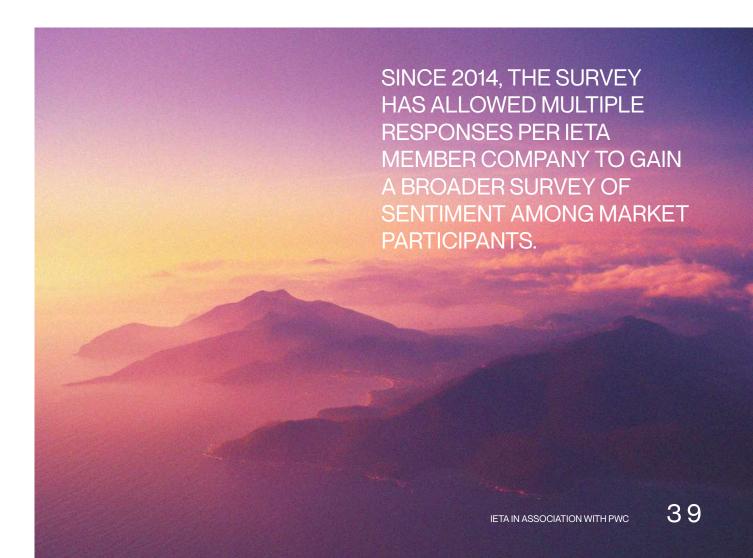
THE SURVEY WAS CONDUCTED BY PWC UK USING AN ONLINE SURVEY TOOL. THE QUESTIONNAIRE WAS DEVELOPED JOINTLY BY PWC UK AND IETA. AN EMAIL WAS SENT OUT TO ALL IETA MEMBERS TO INVITE THEM TO PARTICIPATE. THE SURVEY CONSISTED OF 46 QUESTIONS. PARTICIPANTS WERE REQUIRED TO ANSWER ALL SURVEY QUESTIONS.

However, some respondents did not finish the survey during the time frame in which the survey was open and, in these cases, the results from answered questions were included in the survey results. The questions were predominantly multiple choice with the option of providing comments and alternative answers. The survey was open from 5th September to 7th October 2025. Responses were received from 143 IETA member representatives. Reminders were sent out by email between these dates to increase the response rate. As in last year's edition, unattributed quotes given by survey respondents 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 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 among market participants.

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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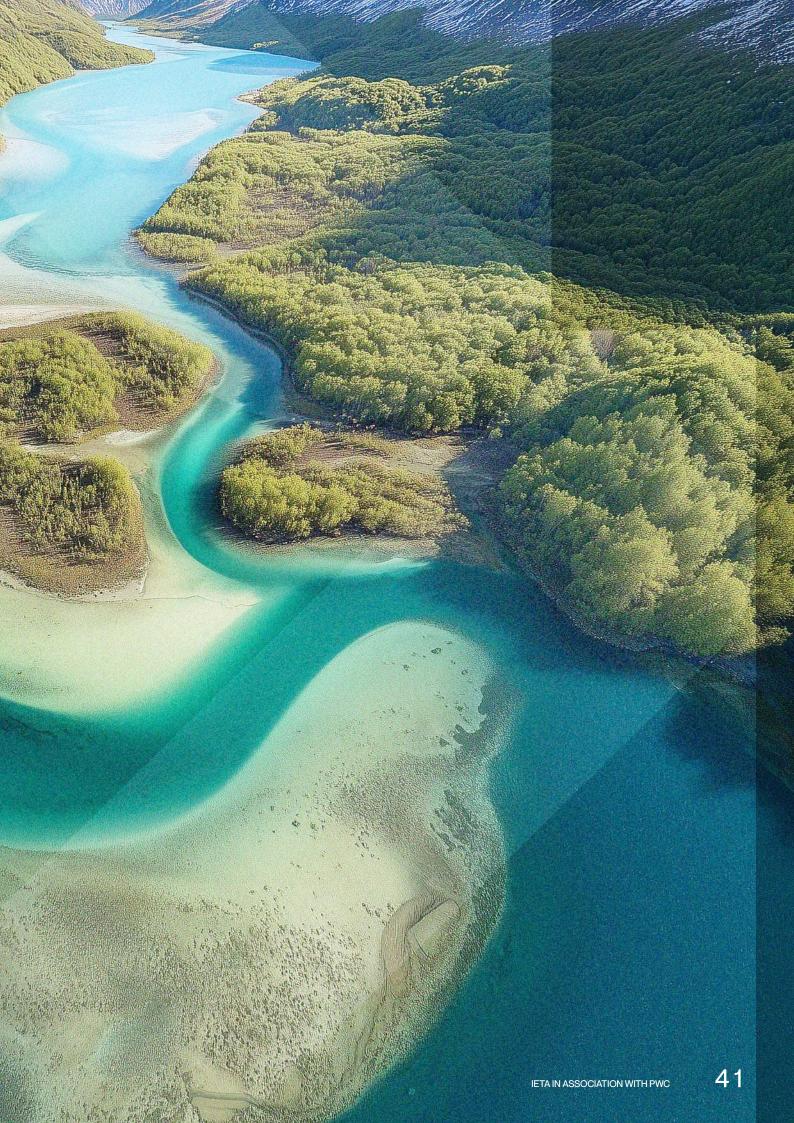
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- https://www.gov.uk/government/publications/ uk-emissions-trading-scheme-uk-ets-policyoverview/uk-emissions-trading-scheme-uk-etsa-policy-overview#expanding-the-coverage-ofthe-uk-ets
- https://icapcarbonaction.com/en/news/ eu-and-uk-commit-linking-emissionstrading-systems-landmark-cooperationagreement#:-:text=May%2022%2C%20 2025,enhancing%20its%20stability%20 and%20efficiency.
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