



**IETA**  
CLIMATE CHALLENGES  
MARKET SOLUTIONS



## GHG Market Sentiment Survey 2017



### **This year's key findings:**

1. 60% of respondents expect the UK to leave the EU ETS following Brexit.
2. China is seen as an emerging leader on climate action: 83% of respondents expect the Chinese ETS to encourage other countries to adopt a carbon price.
3. Corporates are stepping up: climate change is a board-level priority for 77% of respondents. In the last 12 months, board-level engagement on climate change has either increased or remained unchanged for 90% of respondents.

## Key findings from this year's survey:

1. **64% of respondents expect populist political movements to limit action on climate change.** As quoted by respondents, *"emissions trading needs to go on the PR offensive and advocate its achievements more strongly or it risks being undermined during times of political uncertainties."*
2. **Climate change is a board-level priority for 77% of respondents.** Furthermore, 90% of respondents have said that board-level engagement on climate change has either increased or remained unchanged in the last 12 months, indicating that corporates are stepping up.
3. **60% of respondents expect the UK to leave the EU ETS following Brexit.** Many think the UK will implement a national market but link it back to the EU ETS.
4. **59% of respondents expect the EU ETS reform to be in line with the Paris goal of limiting warming to well below 2°C.** However, the majority of respondents think that the EU ETS needs a price floor.
5. **China is seen as an emerging leader on climate action: 83% of respondents expect the Chinese ETS to encourage other countries to adopt a carbon price.** The majority of respondents agree that the launch of the Chinese ETS will reduce competitiveness concerns in other countries.
6. **State-level initiatives and the private sector are seen to continue to drive climate action in the US.** Despite threats of litigation, 90% of respondents expect the California market to exist post-2025.
7. **Canada's carbon markets are expected to grow: 69% of respondents expect this to be driven by the recent Pan-Canadian Framework on Clean Growth and Climate Change.** Moreover, 77% of respondents think that Ontario will link its cap-and-trade programme to the California-Québec market.
8. **CORSIA is expected to be the second largest source of demand for international units after the Paris Agreement.** Almost half of respondents think that the IMO will implement a carbon price, mainly inspired by CORSIA.

## 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](http://www.pwc.com/uk).

## About IETA

IETA is a non-profit international business organisation, established in 1999 to promote market-based solutions to climate change. Our objective is to build international policy and market frameworks for reducing greenhouse gases at lowest cost, which deliver 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](http://www.ieta.org) for more information.





## Message from the President and CEO of IETA

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**Last year the Paris Agreement passed the threshold to enter into force a mere 11 months after its finalisation – a vast improvement on the seven years it took the Kyoto Protocol to reach the same point. It capped a year of climate successes, after the International Civil Aviation Organization agreed upon a new market mechanism for aviation emissions and the Montreal Protocol was amended to cover HFC emissions. It was a truly a banner year for climate policy.**

But 2016 also saw a wave of increased populism around the world dominate the news, sweeping climate action off of the front pages. The “Brexit” referendum in the UK and the Trump election in the USA bred more uncertainty on climate policy.

This shift in the global political atmosphere could have a real impact on the world’s carbon markets – what will be the fate of the UK’s involvement in the EU ETS after the country leaves the EU? Will the US remain a part of the Paris Agreement? How could changes at the national level affect sub-national efforts?

All these issues are probed in the 12th edition of our annual GHG Market Sentiment Survey, carried out once again by PwC. Conducted throughout the month of April, this survey captures market participants’ responses to the pressing issues of our time.

It’s not all doom and gloom, however. The start of the national Chinese ETS later this year will mark a significant milestone for the development of carbon markets globally, and could be a catalyst for other governments to take similar steps. Work continues apace to turn the Paris Agreement from words into hard, concrete actions. Crucially, board-level engagement on climate change remains high, despite the turbulent political scene.

Another significant development last year was the new “CORSIA” mechanism for airlines, to spur emissions reductions from one of the fastest-growing sectors. A long time in the making, CORSIA offers a real opportunity to show how a market can work at a sectoral level, across national boundaries, and effect real change.

Our survey also takes its annual health-check on price expectations for the key markets in which IETA members operate, both for the near term and the future. We also look ahead to where the next opportunities may lie.

IETA’s membership is a mix of actors from all spheres of the carbon market: traditional traders, climate finance specialists, service providers and emitters. The survey captures this broad range of views, from all around the world.

Alongside this survey, IETA’s work year-round continues to drive carbon markets forward and ensure they fulfil their intended goal: to cut emissions in a cost-effective and efficient manner. Our activities include region-specific working groups, the Business Partnership for Market Readiness, ICROA, our series of conferences and workshops, and an array of reports. Consider joining us and adding your voice to the cause!

I hope that this report of our survey results helps you in your work. We are always open to suggestions on how we can improve what we do, so please do not hesitate to get in touch with any feedback.

Thanks, and happy reading!

**Dirk Forrister**  
President and CEO of IETA

# About the survey

This year’s IETA survey reflects on key issues and developments in the greenhouse gas (GHG) markets given a backdrop of significant political 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 only, with more than one response per organisation possible, and open from Thursday 30 March 2017 to Wednesday 26 April 2017.

We received responses from 135 IETA member representatives, from a broad range of locations and organisation types. Participants were given some freedom to select which sections and subject matter they answered on, and therefore a number of statistics are based on samples smaller than 135.

In addition, PwC and IETA jointly hosted a roundtable discussion in London on 18 April 2017 with a number of IETA members to discuss the preliminary survey results. This discussion complemented the online survey by providing a more detailed

exploration of perceptions of the current and future state of the market. Anonymous quotes from roundtable participants and survey respondents are presented alongside the survey results.

The report consists of six sections, which reflect the key areas of focus for carbon markets in an unprecedented period of change.

- 1. Momentum on Climate Action
- 2. European Union
- 3. China
- 4. North America
- 5. Industry Initiatives and Voluntary Markets
- 6. Looking Forward

Figure 1: Location of survey respondents

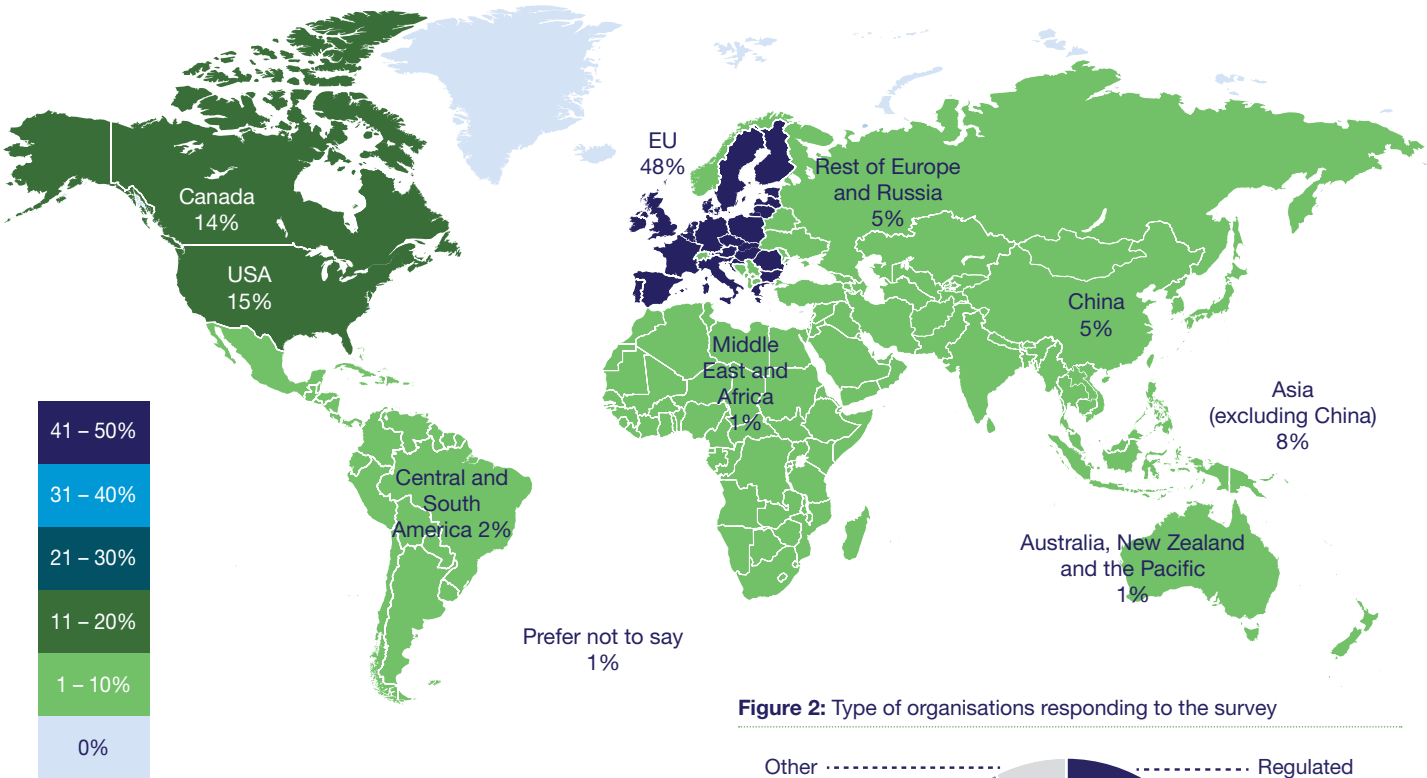
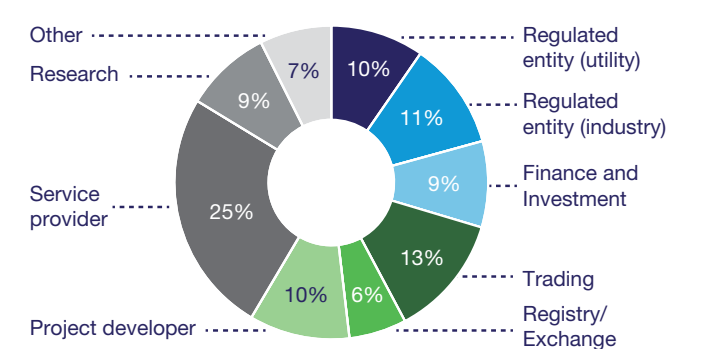


Figure 2: Type of organisations responding to the survey



# Introduction

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The last 12 months have been eventful – the US has sworn in a new President, the UK has triggered Article 50 to quit the EU and called a general election, the Germans go to the polls in September, and there have also been elections in the Netherlands and France which have rebalanced to rise of populist politics elsewhere. The rise of political populism coupled with weak economic activity and low productivity growth brings about uncertainty for the climate change agenda.

## This uncertainty raises a number of key questions:

***Will the UK leave the EU ETS post-Brexit?***

***More critically, will the EU ETS reform align with the Paris goal of limiting warming to well below 2°C?***

***With reduced mandate from the federal government, will state initiatives and regulations enable the US to meet its NDC?***

***Will the recent Pan-Canadian Framework on Climate Change drive expansion and increased linkages in Canadian carbon markets?***

***Will the Chinese ETS get it right with pricing mechanisms and monitoring?***

***What is the progress with achieving an international carbon market and are industry sectors doing more to support this?***

The aim of this year's survey is to gain insight into these issues.

There is an observed shift in climate action trailblazers both geographically and institutionally. There has been a shift from developed countries to developing countries, and from government action to private sector action. China has been tightening its environmental law, boosting its renewable energy uptake, and launching its national ETS this year. If the world's largest emitter has recognised the economic opportunity in climate action, there is optimism that other countries will follow suit. This is also the time for corporates to step up as the financial and reputational risks of climate change become apparent. Last year, the G20 Financial Stability Board set up the Task Force on Climate-Related Financial Disclosures (TCFD), foreseeing climate change as a material risk to companies.

With this many questions in mind, now is the time for carbon market leaders to emerge.

# 1. Momentum on Climate Action

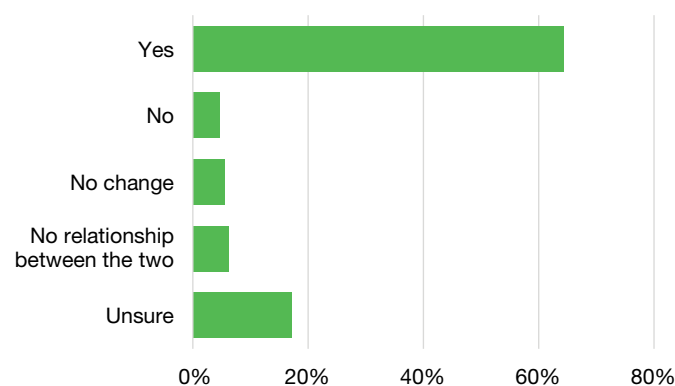
Many governments and companies have accelerated climate action to decarbonise the energy system following the Paris Agreement. This was reflected in the previous IETA survey outcomes, where 82% of respondents to last year's survey expected an expansion of existing carbon markets. There is now a question of whether momentum on climate action will persist despite the rise of populism and nationalism in many countries. Most respondents (64%) think that populist political movements will limit action on climate change. Many think that politicians are distracted by other major issues, such as immigration, and the political space for climate discussions is narrowing.

“The populist movement just distracts politicians and keeps them too busy to progress the climate change agenda.”

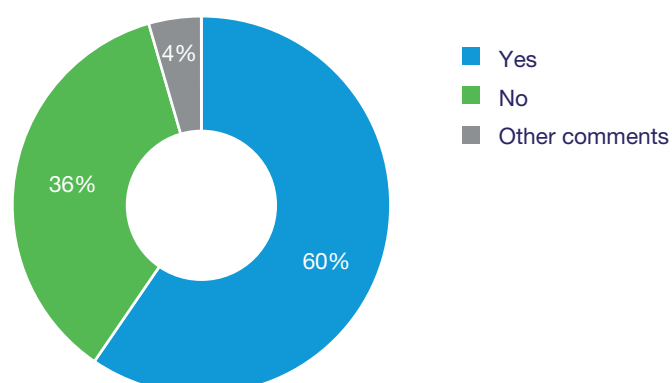
60% of respondents took the view that the UK will leave the EU ETS following Brexit. Many suggest that the UK could develop a national carbon market and link it with the EU ETS, but this represents the views of IETA members and is not based on any political signal. Respondents also think that it is unlikely to happen before the end of phase 3 (2020). There is still a lot of uncertainty around the UK's environmental and climate policy as much of it is currently driven by EU laws. However, it is important to note that despite this uncertainty, the UK government has approved the carbon budgets set out under the Climate Change Act.

Nevertheless, the question remains as to what alternatives the UK may seek if it leaves the EU ETS.

**Figure 3:** Will populist political movements limit action on climate change?



**Figure 4:** Will the UK leave the EU ETS after Brexit?



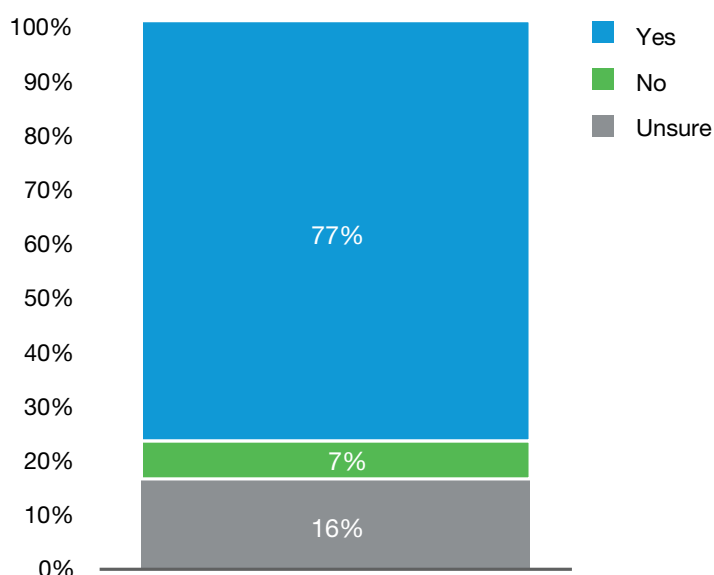
“The UK still has engagements to tackle global warming and the EU ETS is one of the mechanisms that has been used to accomplish this task. Even if they have their own approach, it could be better to share with Europe and other countries.”

## Business maintains climate action momentum despite national political uncertainties

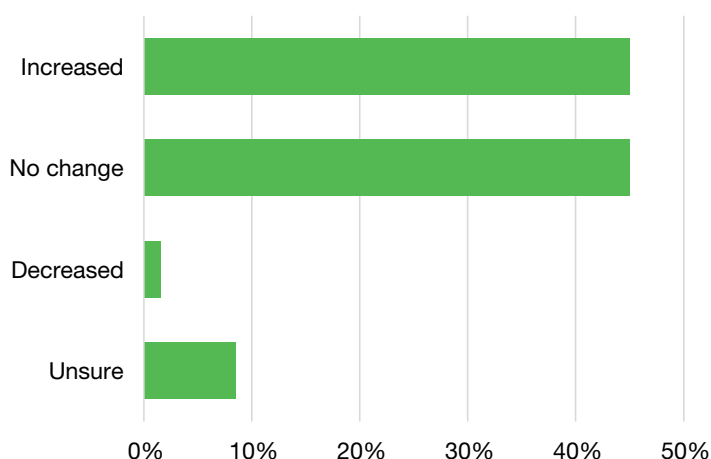
It appears that national-level uncertainties and competing political agendas have not dampened the momentum on climate action in companies. Climate change remains a board-level priority for over three-quarters of respondents.

Almost all respondents said that their board's engagement on the issue of climate change has either increased or remained unchanged in the last 12 months. This is a positive signal that companies now recognise their role in climate action.

**Figure 5:** Is climate change a priority for your board and executive team?



**Figure 6:** How has your Board's engagement on the issue of climate change changed in the last 12 months?



“While political progress will be slowed, private sector investment in renewables could make this less important in time.”

## Emerging countries step up

China and Mexico have demonstrated increased political ambition in tackling climate change and achieving their NDCs. As both countries ramp up their climate policies and launch their national carbon markets, it may be a positive signal to the world that some of the emerging economies are taking a leadership role.

“The US situation feels like it dominates the answer, but in countries like China and Mexico where air pollution is driving action, this can influence climate policy in a different way.”

## Emissions trading needs to go on the PR offensive

IETA members have reflected in their comments that the role and benefits of emissions trading needs to be more strongly advocated, especially during times of global populist scepticism. This should prevent misperceptions that implementing an ETS is more complicated than alternatives such as a carbon tax.

“Emissions trading needs to go on the PR offensive and demonstrate its achievements more positively. Proponents of carbon taxes are benefiting from bad news stories and claims of over-elaborate systems to push the simplicity of a tax.”

## 2. European Union

**Figure 7:** Average carbon price expectations for Phases 3 and 4 over successive GHG Market Sentiment Surveys for the EU ETS

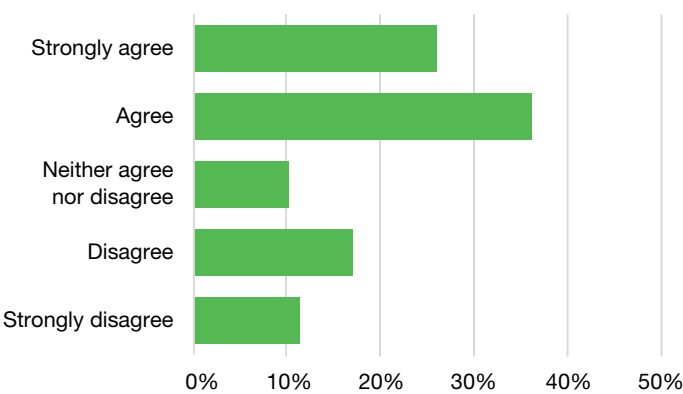


Respondents' expectations of the price of the EU allowances have fallen slightly this year, but remain in the €8-11 range, consistent with the past four years. Regarding Phase 4 prices for the EU ETS, expectations were less bullish than previous years. Possibly as a consequence, the majority of respondents agree that a carbon price floor is needed in the EU ETS (Figure 8).

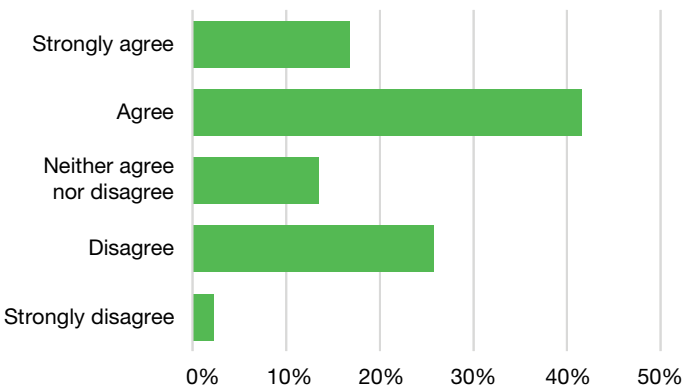
The EU ETS is due to undergo a review for the 2021-30 period (Phase 4). The main objective of the proposed reform is to align the EU ETS with the EU's 40% domestic emission reduction goal by 2030. The reform includes strengthening the market stability reserve, steeper emission reduction trajectory and improved carbon leakage protection rules. Despite the modest price projections, the majority view is positive that the EU ETS reform will align the EU's carbon market with the Paris goal of limiting warming to well below 2°C. Last year, IETA respondents suggested that an average price of around €40 is needed to achieve the Paris objectives. This is far higher than their projections for the EU allowance price this year. However, IETA members have pointed out that prices are not the key driver for the EU achieving its climate target.

“There is a discontinuity: if people expect prices to increase in future, then you would expect to see that price increase now, as investors would buy now to sell on in the future. So there is a gap between the market behaviour and these expectations.”

**Figure 8:** A carbon price floor is needed in the EU ETS



**Figure 9:** I expect the EU ETS Reform to align the market with the Paris goal of limiting warming to well below 2°C





### 3. China

As the major Western economies go through a phase of political uncertainty, China may emerge as a climate change leader. The Chinese ETS is due to launch in July, and more than half of respondents think that the system will include a carbon price floor or ceiling as a means to manage prices within a range.

The Chinese ETS is also expected to deliver positive impacts beyond its national borders. It has the potential to drive momentum for carbon markets internationally, both by reducing competitiveness concerns and offering linkage opportunities with existing markets.

This sentiment is reflected in the survey results, where 83% of respondents think that a successful Chinese ETS will encourage other countries to adopt a carbon price. This is further supported by the opinion that competitiveness concerns will decrease if a major exporter like China implements an ETS:

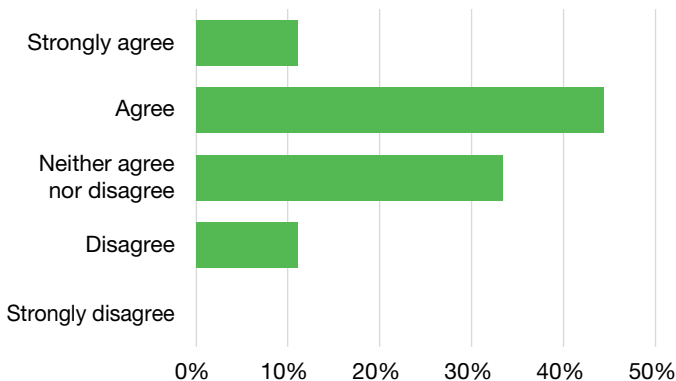
If the Chinese ETS links with existing markets within the next

“Simply saying that emerging countries aren’t doing anything won’t be enough of an argument anymore, so that will be the effect.”

five years, as more than half of respondents expect, it may potentially contribute to a more global market in the long term. Increased bilateral or multilateral forms of cooperation between systems will foster a larger market, enabling countries to increase their climate ambition. However, this is dependent on the compatibility of accounting rules and trading mechanisms of the Chinese ETS. Regardless, there is an overall positive sentiment towards the role of the Chinese ETS in the global context.

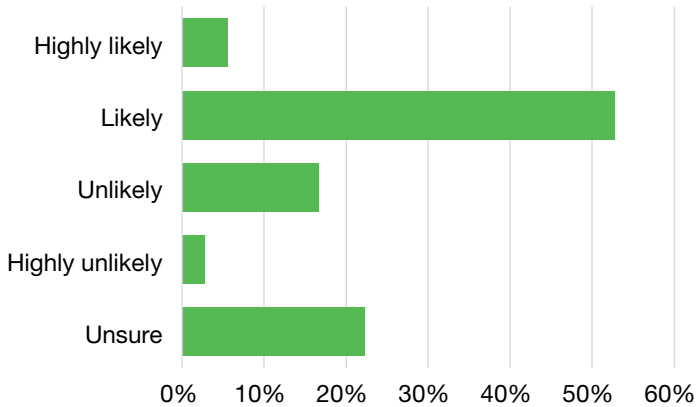
The expected price for the 2017-20 Chinese

**Figure 12:** Concerns about competitiveness in other countries will decrease as China implements its ETS

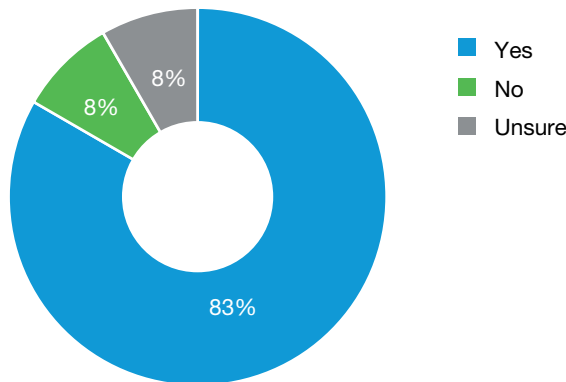


ETS is €6.53, an increase from €6.09 last year; this is the only ETS for which respondents’ price projection has increased compared to the previous year. The price is expected to double to €12.25 in the 2020s.

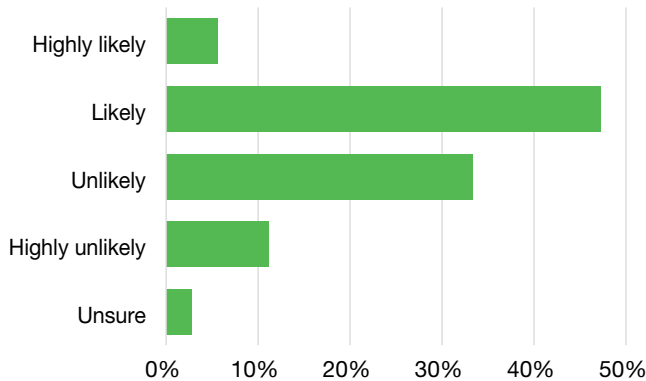
**Figure 10:** How likely is it that the Chinese ETS will include a carbon price floor/ceiling?



**Figure 11:** Will this year’s launch of the Chinese ETS encourage other countries to adopt a carbon price?

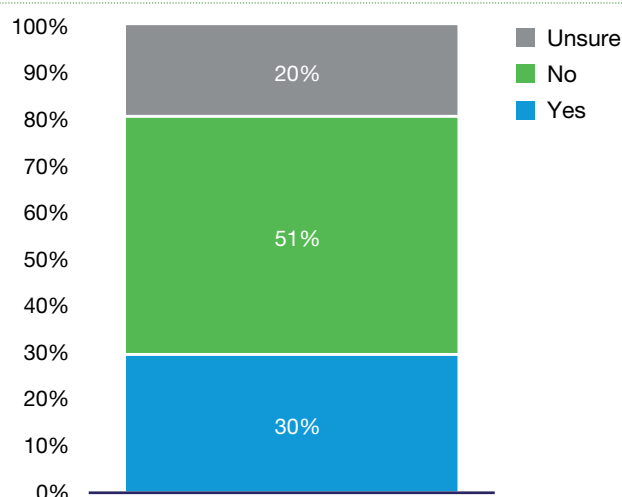


**Figure 13:** Will the Chinese ETS link with existing markets in the next 5 years?



## 4. North America

**Figure 14:** Will the US achieve its NDC target of 26-28% below 2005 levels by 2025?

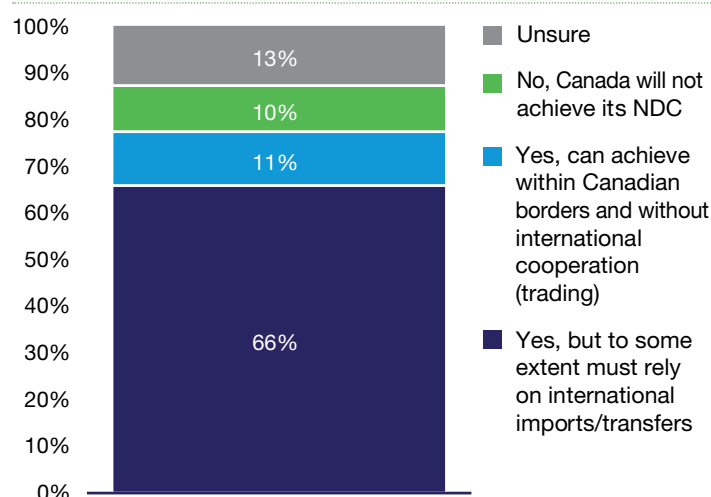


Respondents are more optimistic about Canada achieving its NDC target as opposed to the US: 77% of respondents expect Canada to achieve its target, though only 11% of them think that Canada can achieve this independent of international cooperation. In contrast, half of respondents think that the US will fall short of its NDC target, to achieve a 26-28% emissions reduction below 2005 levels by 2025. Despite the shorter timeframe for the US, this contrast is most likely due to the political appetite in both countries. For example, the Government of Canada launched the Pan-Canadian Framework on Clean Growth and Climate Change, which outlines a federal benchmark for carbon pricing, mandating all jurisdictions to implement carbon pricing by 2018, as well as complementary actions for emissions reduction. As reflected in respondents' majority view, this climate framework will play a dominant role in driving growth in Canada's carbon markets.

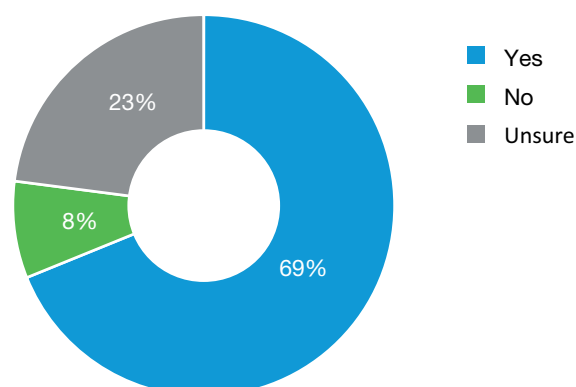
The majority of respondents think that Ontario will join Québec as the second Canadian province participating in the linked market with California.

Despite the current uncertainty on federal climate change policies in the US, such as the Clean Power Plan, climate action and emissions reduction efforts continue to be pursued at the state level. This corresponds with the respondents' view that state-level initiatives and regulation will be the biggest contributor to emissions reductions in the US. Respondents also see the private sector playing an important role in driving systemic changes in the energy system, such as growth in renewables, natural gas, and efficiency improvements, which will inevitably drive the transition away from fossil fuels.

**Figure 15:** Will Canada achieve its NDC target of 30% below 2005 levels by 2030?



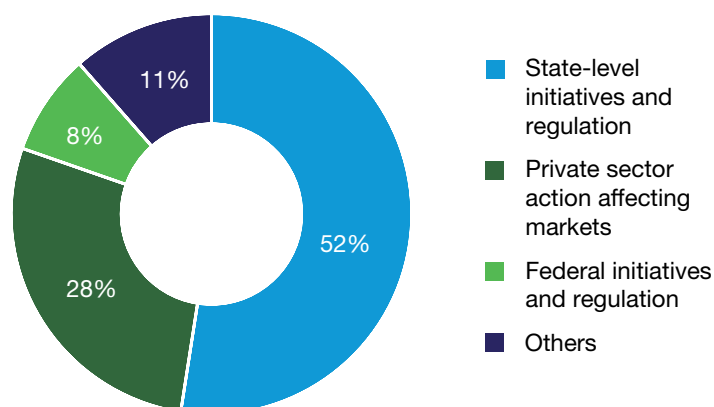
**Figure 16:** Will the Pan-Canadian Climate Framework drive growth in Canada's carbon market?



**Table 1:** Percentage of respondents that think Ontario will link its cap-and-trade programme to the California-Québec market

Yes	77%
No	7%
Unsure	16%

**Figure 17:** What are the biggest contributors to US action for emissions reduction?



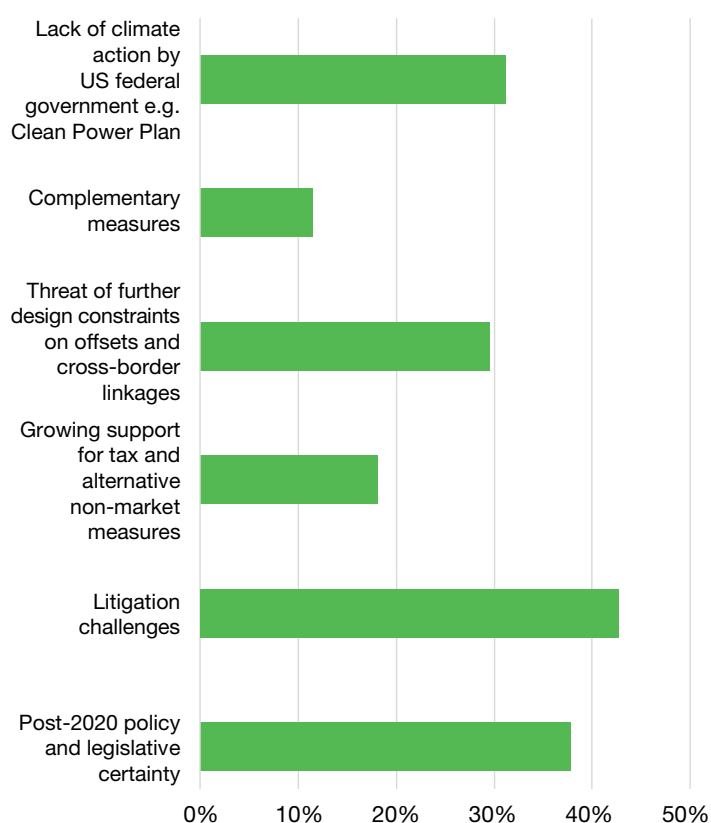
California has long been the leading US state on environmental policy and climate initiatives, with an established cap-and-trade programme. However, an only recently resolved legal battle has dampened demand for permits; and any potential effects from changes in national policy remain an unknown. These issues, as well as post-2020 policy and legislative uncertainty, are synonymous with what respondents think are the biggest threats to California's market. These current uncertainties may have played in role in the slight decrease in price expectations of \$15.07 as opposed to \$16.10 for the WCI in 2017-20. There is an upward trajectory in price expectations post-2020 to \$20.89.

**Table 2:** Price projections for the WCI

	2016 estimate	2017 estimate
2017-2020	\$16.10	\$15.07
2021-2030	-	\$20.89

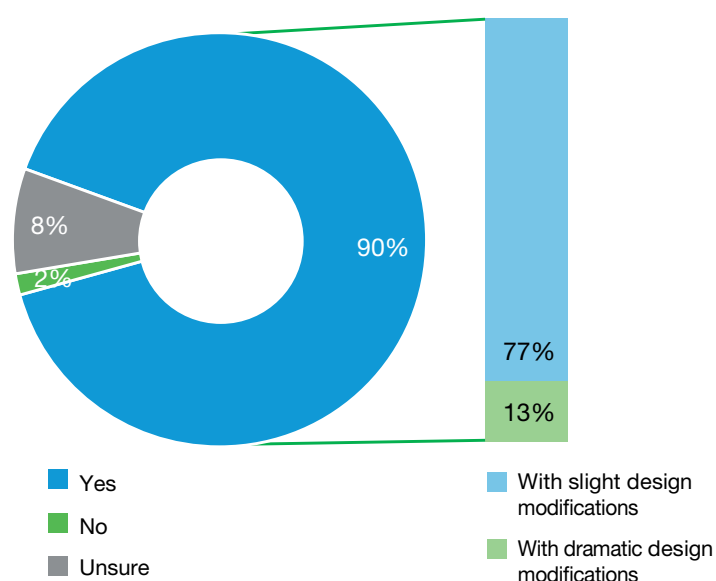
“There is a reliance in the US on the states driving forward carbon reduction policies. Even in the Bush era, we saw states such as California maintaining the momentum.”

**Figure 18:** What are the current biggest threats to California's market?



Nonetheless, an overwhelming majority of respondents think that California's cap-and-trade market will exist post-2020. Furthermore, 77% think that it will only undergo slight design modifications as opposed to dramatic design modifications.

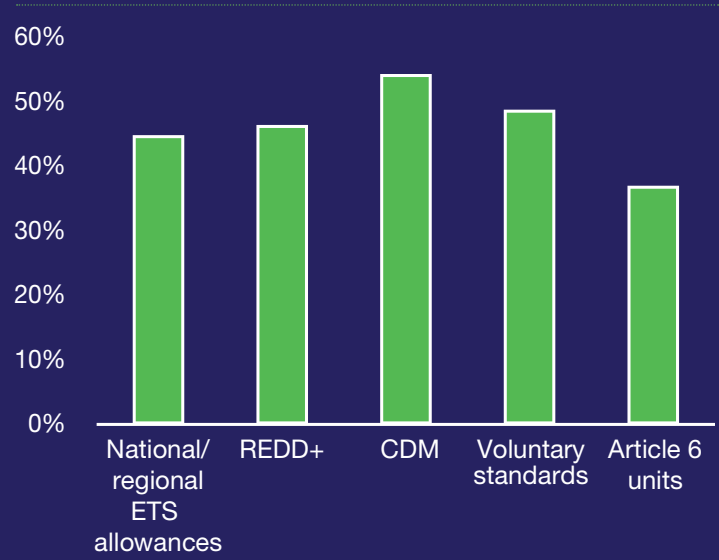
**Figure 19:** Will California's cap-and-trade market exist post-2020?



# 5: Industry Initiatives and Voluntary Markets

In 2016, the International Civil Aviation Organization (ICAO) agreed to establish the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This is a global market-based measure to offset emissions from aviation as of 2021. When asked about the type of carbon credits airlines will source for compliance, respondents' views were relatively evenly split between different types of units, although the CDM scored slightly higher than the others. IETA members suggested that there are a lot of unknowns as to what units will be valid and the role of Article 6 in the Paris Agreement.

Figure 20: What type of carbon units do you think airlines will source for their compliance under CORSIA?



“It seems that ‘just about anything will go’ and that’s what we’re hearing from CORSIA. There may be a lot of choice even to individual operators.”

Respondents were also asked about the main source of demand for international units up to 2030. The results show that the Paris Agreement is expected to play a significant role in driving demand for international units. This is closely followed by compliance under CORSIA, signalling the role of industries at a global-level in sustaining carbon markets.

Figure 21: What do you think will be the main source of demand for international units up to 2030?



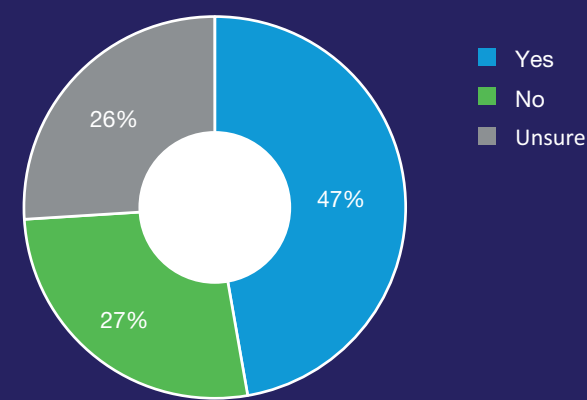


Almost half of respondents were positive about the International Maritime Organization (IMO) implementing a carbon price by 2025, becoming the second sector after aviation to establish an international market-based carbon pricing mechanism. This is likely to be driven by the efforts of the aviation sector.

“Coming after CORSIA makes it more possible for the IMO, as CORSIA will set up the model. There will also be more pressure to the shipping industry now.”

However, alternative views were presented during the roundtable discussion such as the IMO prioritising energy efficiency and sulphur removal initiatives over emissions trading. Furthermore, there is still some resistance from the sector, suggesting that including the shipping sector in the EU ETS for example will undercut global efforts to reduce emissions in that sector.

Figure 22: Will the IMO implement a carbon price by 2025?

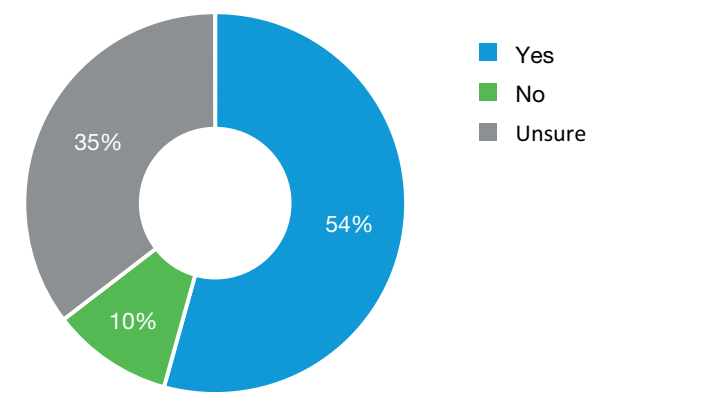


# 6. Looking Forward

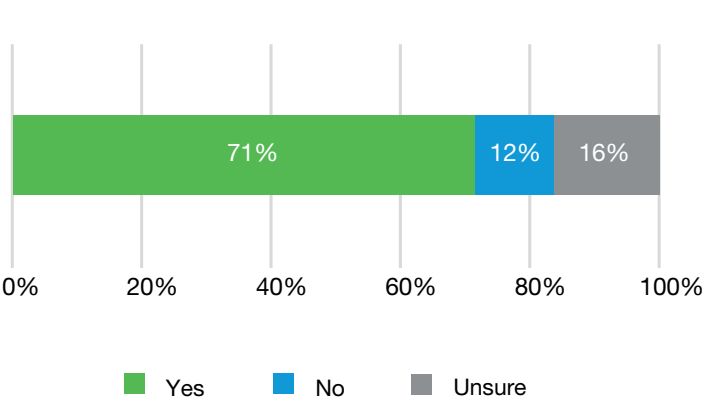
Australia’s momentum to implement a carbon market has gone through ebbs and flows with changing governments. The Clean Energy Bill 2011 legislated the implementation of a national ETS, but it was repealed a year before its 2015 launch. Looking forward, more than half of respondents think that Australia will implement a national ETS by 2025, though a third of respondents are unsure.

Looking more broadly on a global level, the sentiment towards more linkages between national carbon markets remains positive. 71% of respondents think that the implementation of the Paris Agreement will lead to more bilateral or multilateral linkages between national ETSS.

**Figure 23:** Will Australia implement a national ETS by 2025?



**Figure 24:** Will the implementation of the Paris Agreement lead to more linkages between national carbon markets?



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 27 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 30 March 2017 and closed on 26 April 2017. Reminders were sent out by email between these dates to increase the response rate.

As in previous editions of the IETA GHG Market Sentiment Survey, this report includes unattributed quotes from several carbon market experts. These quotes were gathered during a roundtable discussion hosted jointly by PwC and IETA, which took place in London on 18 April 2017. This year, quotes were also taken from the survey itself, giving all IETA members the opportunity to contribute.

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.

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 to 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.

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