



ADVANCING MARKET SOLUTIONS FOR CLIMATE CHANGE

# GHG Market Sentiment Survey 2013

8th Edition: A survey of current market sentiment among IETA members

## This year's three key findings:

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1. Nine out of ten IETA members that participated in the survey believe it is essential to intervene in the EU ETS in the short-term which may raise prices.
2. Two thirds of respondents expect EUAs to trade below €10 and CERs below €5 between now and 2020. But IETA respondents also believe that a global price of around €47 is needed to shift economies onto a low carbon pathway.
3. 82% of respondents indicate that domestic or regional policy developments increasingly drive carbon markets and climate action. The linking of domestic programmes is expected to be more important than the UN process in the short-term.

Conducted by:



## Survey highlights

Highlights of the 8th GHG Market Sentiment Survey include:

1. Most IETA members responding to our survey (78%) do not believe that COP18 in Doha had a positive impact on the carbon markets. This breaks the trend of increasing optimism since the disappointment of COP15 in Copenhagen in 2009. The expectation for COP21 is that a global agreement to tackle climate change will be reached, but not in the form of the legally binding emissions targets promised by governments around the world.
2. There are low expectations for the global deal in 2015. 90% of participating members expect a mixture of legally binding targets and voluntary pledges which will not be stringent enough to achieve the 2 degrees target.
3. Average price expectations for EUAs and CERs are lower than ever. Compared to the current market price, respondents do, however, think that prices will recover throughout Phase III of the EU ETS to around €10 for EUAs and around €5 for CERs.
4. The vast majority (87%) of respondents believe that in the short-term intervention which is likely to raise carbon prices in the EU ETS is essential. 96% of respondents also believe that longer term structural reform is needed to safeguard the scheme in the long-term.
5. Asia's emerging carbon markets are expected to become more important in the coming years. The majority of respondents think that China and South Korea will have national cap-and-trade programmes before 2020. Few expect national programmes in Canada or the US.
6. Respondents expect prices in California to remain stable over the next three years, and as a result the programme is expected to represent a larger share of the global carbon market by value.
7. The Green Climate Fund is not currently expected to provide significant opportunities for carbon market participants. Credit risk guarantees and concessional lending are regarded as the most effective at stimulating private sector investment in climate change action.

Please see page 18 for a list of acronyms used throughout this report.

## About PwC

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PwC UK helps organisations and individuals create the value they are looking for. We are a member of the PwC network of firms in 158 countries with more than 180,000 people committed to delivering quality in assurance, tax and advisory services. Tell us what matters to you and find out more by visiting us at [www.pwc.com](http://www.pwc.com).

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 helping with longer-term strategic thinking. The team has a unique blend of skills, experience and tools, as well as scale and reach in all service areas. The PwC global S&CC network includes 800 practitioners operating over 62 countries, with 100 based in the UK.

## Message from the President and CEO of IETA

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Market sentiment is much more fun to assess when times are good, attitudes are upbeat, and business opportunities are abundant. But it is equally important to take stock of views during troubled times, when markets confront challenges and face setbacks. It demonstrates their resilience – and provides insights on their future directions.

This year's Market Sentiment Report provides a clear assessment of the challenges market participants face at present – and their attitudes about the future of carbon markets. Throughout 2012, emissions trading markets were buffeted by the headwinds of the global economic crisis. But IETA members feel that the carbon market will pick up its pace in time, as economies improve and new markets take shape, stimulating their own demand.

Over the past 12 months, we saw Europe's carbon market struggle through its most difficult period. But there were also bright spots: new markets came to life in California and Australia. RGGI adopted changes to strengthen demand, and Alberta began considering a significant increase in its tech fund buy-out price and other reforms. Increasingly, market interest turned to new markets under development, particularly in the countries involved in the World Bank's Partnership for Market Readiness.

The long-term view remains cautiously optimistic. We know that if world leaders are going to take steps to seriously address climate change in line with the warming increase of just 2°C, an enormous amount of clean energy investment is required. There is no better policy tool for prompting this transition than an emissions market that attracts business support and provides incentives to reduce emissions. This survey reflects those views.

IETA is delighted to present the 2013 edition of our GHG Market Sentiment Report. This marks our 8th survey of the carbon market sentiment worldwide. The IETA Secretariat and the PwC UK Sustainability and Climate Change Team conducted this survey of our membership of emissions trading and climate finance professionals in the month leading up to the 10th anniversary of Carbon Expo in May 2013. With over 70 of our member companies responding, we believe these results provide an important barometer of carbon market and climate finance opinion. It gauges not only views of past and current performance, but expectations of the future – from the people who will shape that future.

IETA's membership covers a broad spectrum of participants from all parts of the emissions trading and climate finance industry, making us well placed to give a broad view. Our global membership reflects the expanding nature of international climate politics and broader interest in the carbon markets and climate finance.

I hope that you will find the Report and results of the survey as useful and enlightening as I have. We hope that it provokes discussion – and creative thinking. We always welcome suggestions for improving this work, so we invite your feedback.

A handwritten signature in blue ink that reads "Dirk Forrister". The signature is fluid and cursive.

**Dirk Forrister**  
President and CEO of IETA

# About the 2013 survey and report

As in previous editions, this year's IETA survey has reflected on key issues in the greenhouse gas (GHG) markets. The survey is designed to assess key dimensions of market sentiment such as future price and policy expectations over time, as well as capturing market participants' perceptions of the market and policy developments of the past 12 months. In doing this, the IETA survey intends to complement, rather than duplicate, other carbon market surveys.

This year, the survey was conducted among IETA members only, with one response per organisation. A total of 73 organisations participated, which represents a response rate of 53%. As Figures 1 and 2 show, the responses were derived from a wide range of geographies and organisation types.

In addition to the survey, PwC and IETA jointly hosted a round-table discussion with several IETA members to conduct a more detailed exploration of perceptions of the current and future state of the market.

This report is based on both the survey and this roundtable discussion, and consists of three main sections:

1. The EU ETS and CDM;
2. International negotiations and the Green Climate Fund;
3. New and emerging markets, sectors and protocols.

Unattributed quotes from the roundtable discussion are presented throughout this report.

Figure 2: Types of organisations responding to the survey (percentage of respondents per organisation type)

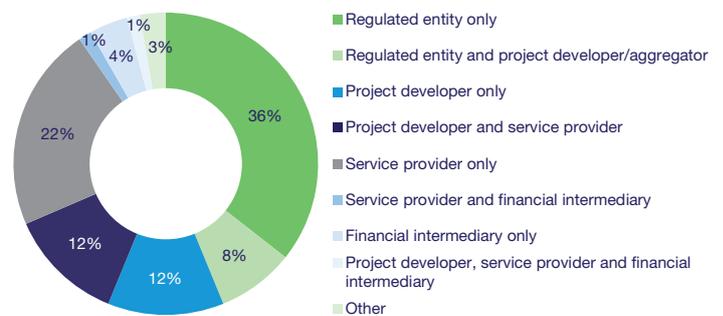
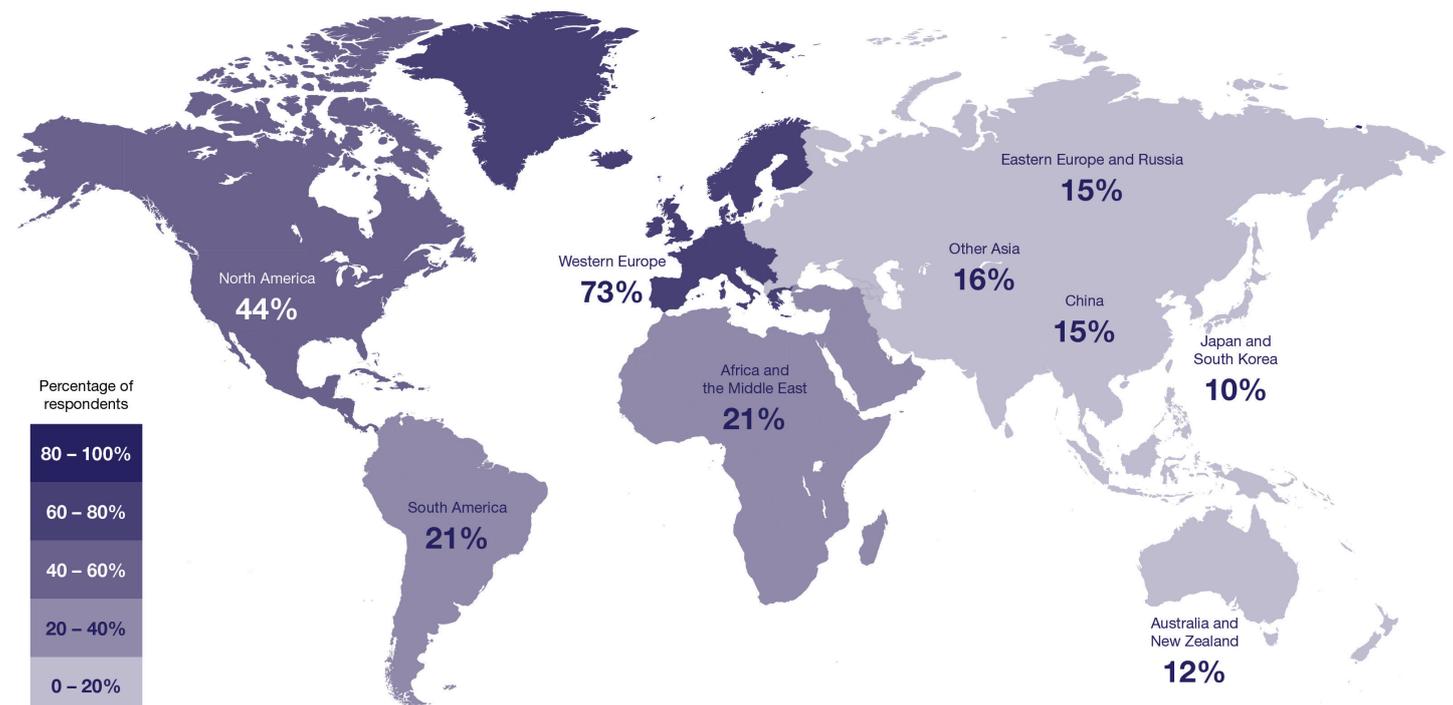


Figure 1: Regions where survey respondents operate (percentage of respondents per region)



# Introduction

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In May 2008, Phase II of the European Union Emissions Trading Scheme (EU ETS) had just started, and despite general discontent with the international negotiations and low expectations for what was to come in Copenhagen, sentiment was positive. Market participants reported strong confidence in the long-term viability of the EU ETS and rising confidence in the functioning of the Clean Development Mechanism (CDM). Average price expectations for Phase III were above €30 for EU Allowances (EUAs) and above €20 for Certified Emission Reductions (CERs).

These expectations, however, did not foresee the impacts of the economic crisis that unfolded in Europe not long after.

Subsequent IETA surveys have captured the steady fall in market confidence and the impact of the economic crisis on the world's major carbon markets. Average price expectations fell sharply alongside actual prices. EUA spot prices dropped from around €30 in mid-2008, to around €10 just six months later. And after a relatively stable period throughout the rest of 2009 and 2010, another decline started in the second quarter of 2011.

The recession in Europe since 2007, and consequent decline in industrial output, has resulted in a substantial oversupply of emission allowances. A late flood of UN offset credits and lack of a policy response prompted a dramatic collapse in prices for EUAs and CERs in early 2013. At the time of writing, EUAs trade at just over €3.50 and secondary CERs (sCERs) at around €0.40, 10% and 2% of their expected levels in 2008, respectively.

Having overcome other issues such as registry fraud, the start of the third compliance period in the EU has brought new market design features such as new rules for offsets, EU-wide cap-setting, an increase in allowances auctioned, and broader sectoral coverage.

These design features, however, have brought further challenges to the system. The inability to be flexible in the timing of these EU-wide auctions resulted in the European Commission (EC) proposing the backloading of the auctioning of 900 million allowances between 2013 and 2015, only to be rejected by the European Parliament in April of this year. Another vote in the Parliament's plenary is due in July this year.

A parallel policy debate is unfolding in the aviation sector. In response to the formation of the High Level Group on Climate Change (HGCC) at the International Civil Aviation Authority (ICAO), a UN body, the EC adopted a 'stop the clock' proposal to delay the introduction of international aviation in the EU Emissions Trading Scheme (EU ETS) in March this year. The EC has given ICAO one year to propose international regulation for the sector. A decision either way is expected at the 38th ICAO Assembly in September 2013.

Despite these setbacks for the EU ETS and the CDM, different stories emerge from other parts of the world.

In North America, the first compliance period of both the Californian and Québécois schemes have started. Allowances have so far traded with limited price volatility.

In Australia, a carbon tax was introduced in July last year to prepare for the cap-and-trade programme that is to be launched in 2015. British Columbia, a Canadian province, has kept in place its carbon tax, which may help it prepare for an eventual linking to the California and Quebec markets through the Western Climate Initiative (WCI).

The nine Regional Greenhouse Gas Initiative (RGGI) states have called for a review that may lead to a revision of the regional cap.

At the federal level in the US, there is increasing activity in the form of task forces and draft legislation that have been proposed to address climate change.

And finally, in Asia several countries are moving forward with implementing systems, notably China which will launch its pilot trading schemes later this year and South Korea which will launch a nationwide system in January 2015.

It is against this background of mixed messages that we have conducted our 8th GHG market sentiment survey.

**“We can highlight positive stories from elsewhere in the world, but should not divert attention away from a key priority: keeping the existing markets alive.”**

# The EU ETS and CDM

## EUA average price expectations for Phase III higher than current market price

The majority (56%) of respondents expect that the average EUA price during Phase III of the EU ETS, which runs from 2013 to 2020, will be between €5 and €10. This is significantly lower than price expectations in previous years, but higher than the current EUA price of around €3.50. Only a few respondents (11%) believe EUAs will trade at around its current price throughout the remainder of Phase III.

A significant minority (33%) also believes the price could even be above €10. With the backloading proposal still up in the air, and discussions around structural reform

ongoing, this optimism might reflect an expectation that the EC will eventually correct the severe oversupply of allowances in the EU ETS (for more detail, see next page). EUA average price expectations for Phase III of the EU ETS have fallen over concurrent IETA GHG Market Sentiment Surveys since 2008. With the exception of 2011, where carbon market participants showed renewed optimism, there has been a steady decline over time in average price expectations for Phase III, from €34 in 2008 down to €26 in 2010, then down from €31 in 2011 to €10 in this year's survey.

“The EU ETS is not broken. It functions like a market. What is broken are its two main objectives: to drive down emissions and to provide a clear price signal.”

Figure 3: What do you expect will be the average EUA price during Phase III of the EU ETS? (percentage of respondents)

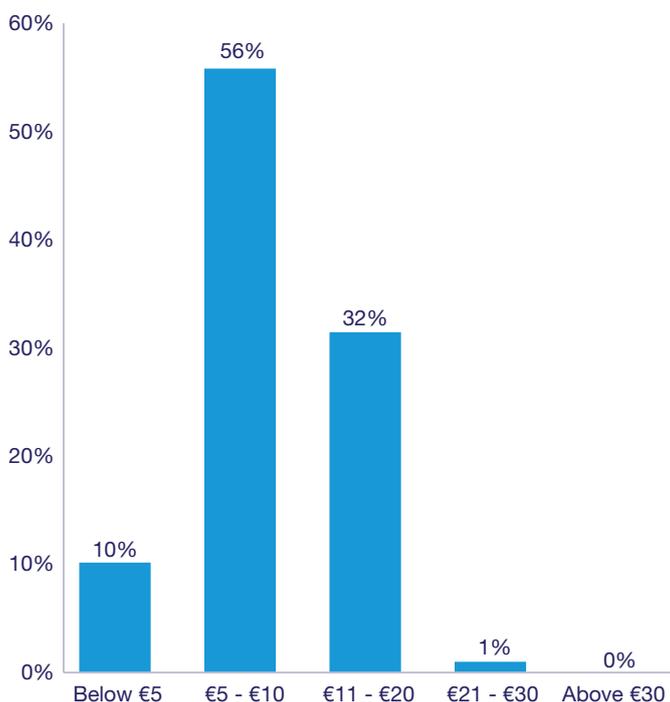


Figure 4: Average EUA price expectations for Phase III over successive surveys



# When to expect EU ETS reform?

“That controversial word: intervention. If it were called a stability mechanism, like in monetary policy, no-one would oppose it.”

**The EU ETS faces a severe oversupply of allowances and eligible offsets as it enters its third compliance period. This has led to a dramatic fall in prices since mid-2012.**

To limit oversupply in the market and give prices a short-term boost, the European Commission proposed a draft bill to delay scheduled auctions of 900 million EUAs, the so-called backloading proposal. The vast majority of respondents (87%) believe the EC should intervene in the short-term in the EU ETS. In April of this year, however, the proposal was rejected by the European Parliament (EP), and will now be subject to another plenary vote in July.

Apart from short-term intervention however, the EC is also considering structural reform of the EU ETS. Reflecting the perceived lack of political ambition in the EU, very few survey respondents believe such structural reforms will take place in the short-term. Only 17% believe that the EU ETS will be reformed before the European Parliamentary elections in May 2014.

Almost half of respondents (45%) think that setting an ambitious emissions target (and hence cap) for 2030 would be the most effective approach to reform. 39% advocate that the target be set before 2015, compared to 6% advocating that it be set after 2015.

One-in-five respondents indicated that a change to the system to allow for a flexible supply of allowances instead of a predetermined, fixed amount would be the best way to reform. It is noteworthy that only 8% of survey participants advocated an auction reserve price, a design feature which is included in some other programmes, such as California.

Figure 5: Should reforms be made to the EU ETS which significantly raise the price of EUAs in the next few years? (percentage of respondents)

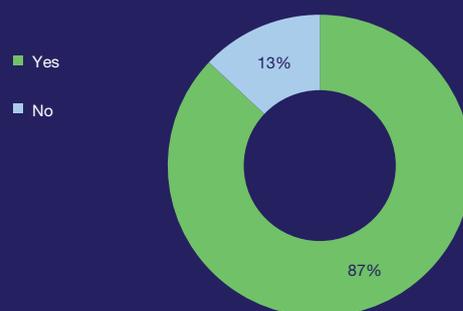


Figure 6: How likely do you think is structural reform of the EU ETS before the European Parliamentary elections in 2014? (percentage of respondents)

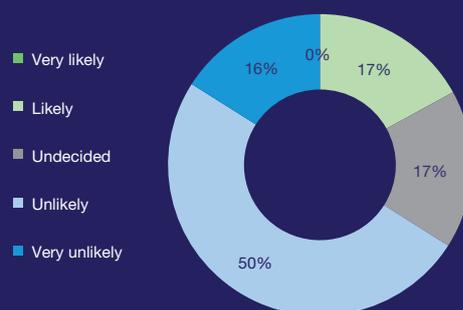
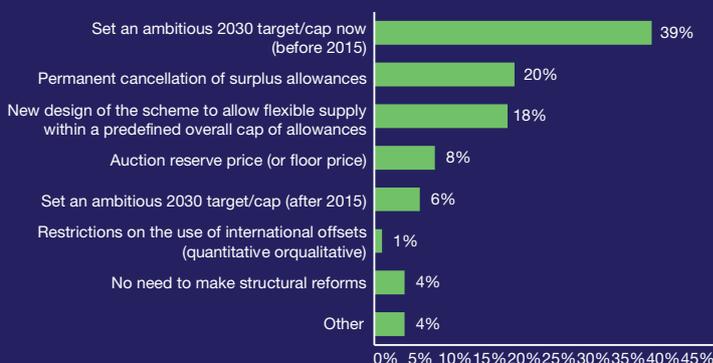


Figure 7: What would be the best way to structurally reform the EU ETS? (percentage of respondents)



## CER price expectations lower than ever before

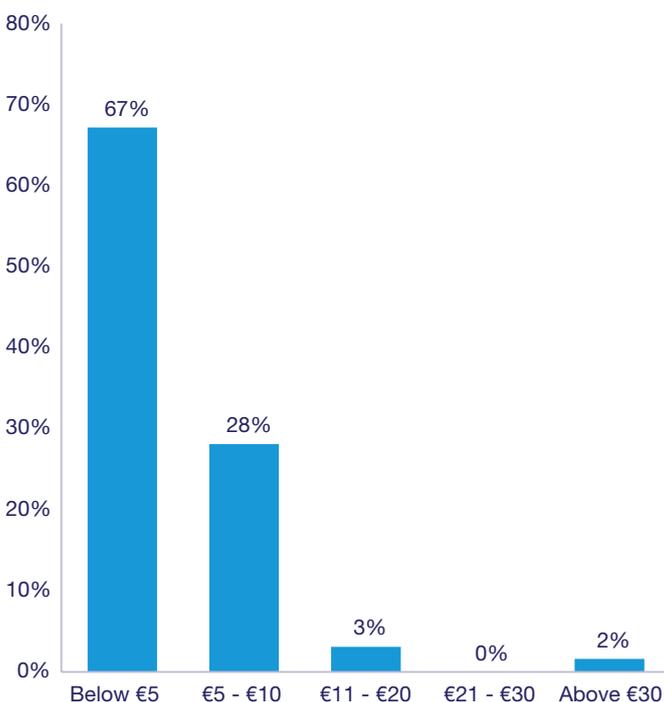
Following chronic oversupply of EUAs and UN offsets in the EU ETS, and the failure to reach an ambitious climate deal to succeed the first commitment period of the Kyoto Protocol, CER prices have fallen to around €0.40. The majority (67%) of respondents expect the average CER price to be under €5 until 2020.

The greatest share of demand for CERs has historically come from entities regulated under the EU ETS. The use of offset credits in Phase II, however, means that far fewer can be used during Phase III. Just 5% believe that CER prices could be above €10 which could reflect the view that CERs are eligible in new compliance programmes outside of the EU ETS.

As with EUAs, average price expectations for Phase III CERs have diminished substantially over time. After a peak of optimism in 2011, price expectations plummeted over subsequent years.

“The CDM has showed it has been a little too successful, as there is no demand for credits now.”

Figure 8: What do you expect will be the average CER price during Phase III of the EU ETS? (percentage of respondents)



## No alternative to the CDM in sight

When respondents were asked whether they believe that new market mechanisms might be introduced by the UNFCCC to replace or complement the CDM, the responses were mixed. Only policy crediting and sectoral crediting were considered a possibility before 2020, with 51% and 46% of respondents indicating this likely, respectively. Just 29% of respondents said the same for sectoral trading.

Figure 9: Average CER price expectations for Phase III over successive surveys



# International negotiations and the Green Climate Fund

## The waning influence of the UN process

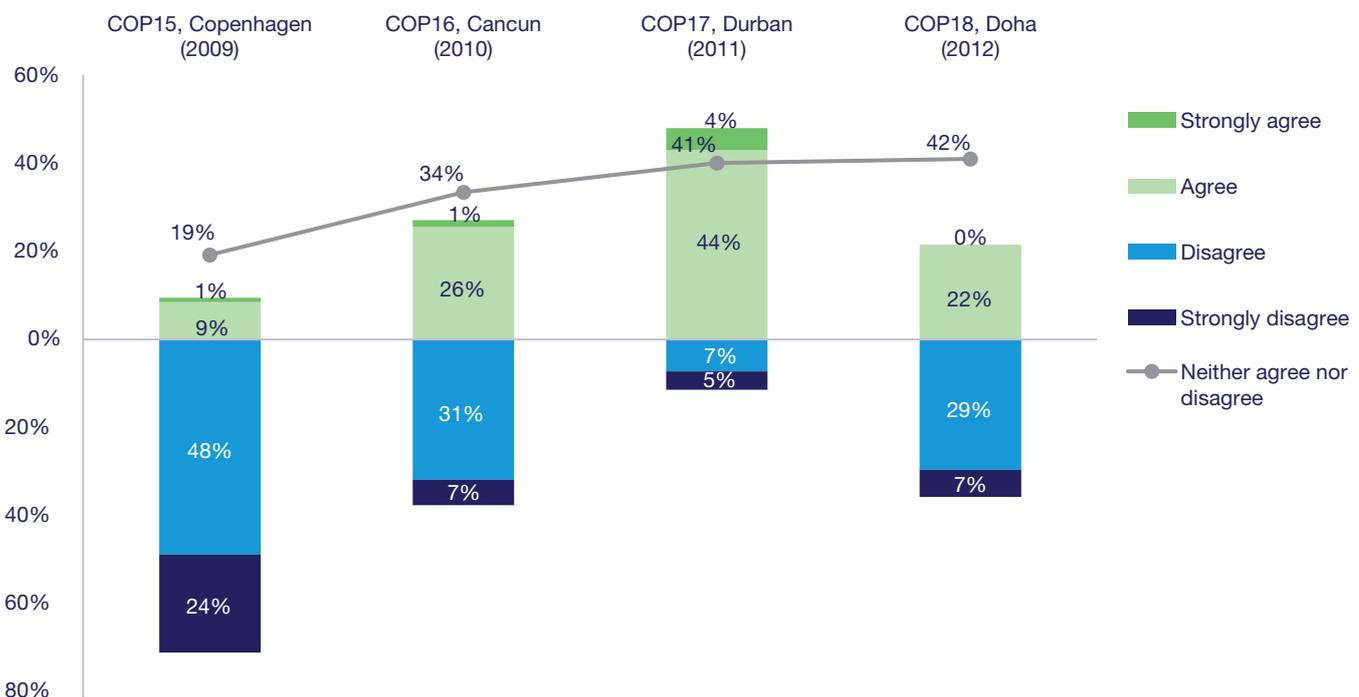
Respondents have mixed views on the impacts of COP18 in Doha on the carbon markets, with roughly equal numbers stating that the outcome of the talks was either positive or negative. Since the collapse of the talks in Copenhagen, the carbon market had regained confidence in the UN process. However, while almost half of respondents felt that the outcome of the 2011 Durban talks was positive for the carbon markets, this was down to 22% for Doha.

At Doha, the EU, Australia and a small number of other countries together representing 15% of global emissions adopted the second commitment period of the Kyoto Protocol, but no clear plan was drafted for what a global, legally binding deal in 2015 might look like. Other discussions related to loss and damage, institutional housekeeping, and climate finance.

What is more significant now is that nearly half the responses are neutral about the impact of COP18 on the carbon markets. The size of this neutral group has increased over time, from one-in-five after COP15 to two-in-five after COP18. This increase in ambivalence about the process may reflect a more fundamental sense that UNFCCC negotiations are of limited relevance to the operation of carbon markets.

“The international climate negotiations are taking on the attributes of WTO trade rounds.”

Figure 10: To what extent do you agree the COP was positive for the carbon markets? (percentage of respondents)



## Negotiations outlook: the winding road to COP21

The ambivalence of last year extends to the expectations for this year's COP in Warsaw, which is not expected to have much influence on carbon prices or investment decisions.

The vast majority (91%) of respondents do believe that COP21 will end with some type of international agreement on emissions reduction targets. However, only 1% thought this would involve legally binding targets for all major economies consistent with limiting the temperature increase to two degrees. Opinion is split as to whether this deal will consist of a mix of legally binding targets and voluntary pledges, or whether it will only consist of non-binding pledges.

This outlook leads few respondents to believe that emissions in major emerging economies like Brazil, South Africa, India, and China will start falling soon. Over half (54%) believe this will only happen after 2025.

These outcomes are in line with respondents' views the limited influence that the next assessment of the IPCC is expected to have. The 5th assessment, due to be released in stages between September 2013 and October 2014, is thought to only have a moderate impact on the negotiations (75% of respondents). Almost one in five respondents (19%) thinks it will have no impact at all. This stresses the notion that negotiations are only partially driven by science, and instead largely by political will and economic interests.

“Kyoto created the carbon markets. The UN has now moved away from mitigation or carbon pricing and instead focuses on development.”

Figure 11: Do you expect the COP19 in Warsaw will have much influence on: (percentage of respondents)

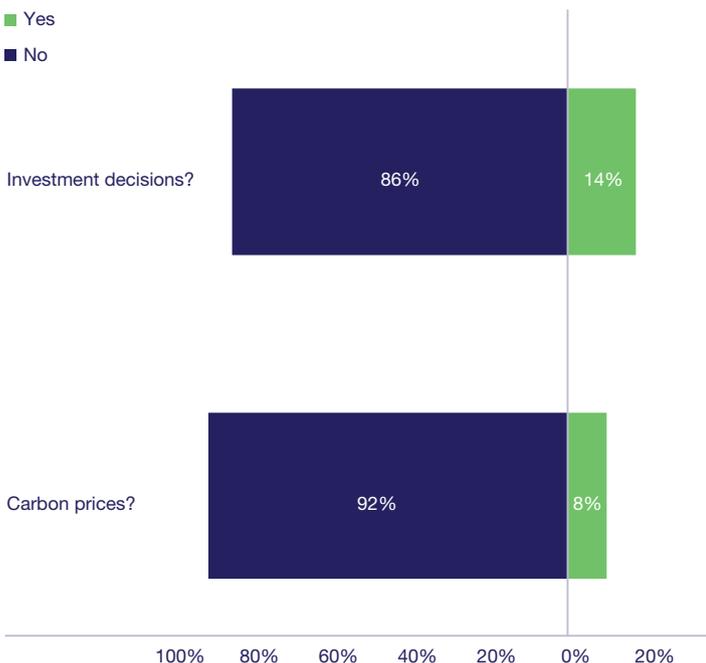
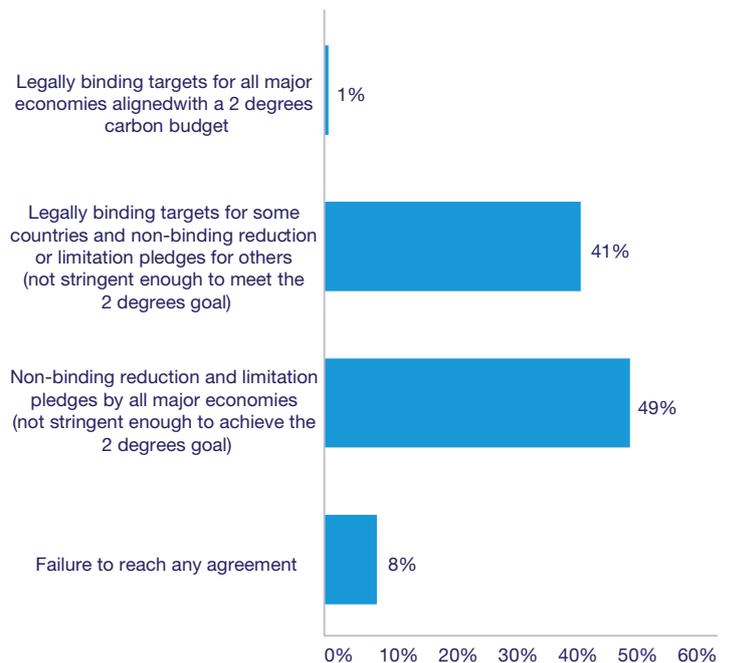


Figure 12: What do you expect will be the outcome of COP21 in 2015? (percentage of respondents)



## Increased focus on alternative policy developments outside the UNFCCC process

Given the limited confidence in meaningful progress on carbon markets through the UNFCCC, we asked what international policy developments could have the most impact. We asked survey participants to compare the UNFCCC process to other developments including the World Bank’s Partnership for Market Readiness (PMR); the potential regulation of aviation emissions through ICAO (see section 3 for more detail); and the bilateral decisions of national and subnational schemes to link with each other. Nearly three quarters of respondents ranked the linking of domestic and/or regional carbon markets as one of the two most important developments and higher than the international negotiations.

The PMR and ICAO developments are thought to be of less overall importance to the carbon markets than the international negotiations process. Nonetheless, they can have substantial impact on particular sectors or countries.

In addition to these policy developments on the international stage, several countries and jurisdictions have started their own cap-and-trade schemes or other forms of GHG emissions regulation (see section 3 for more detail). The vast majority of respondents (82%) now think these domestic initiatives will be more important over the short- to medium-term than the international climate negotiations.

Figure 13: Please rank the following international policy developments in terms of their importance for the carbon markets (graph based on percentage of respondents that ranked the development as either number 1 or 2)

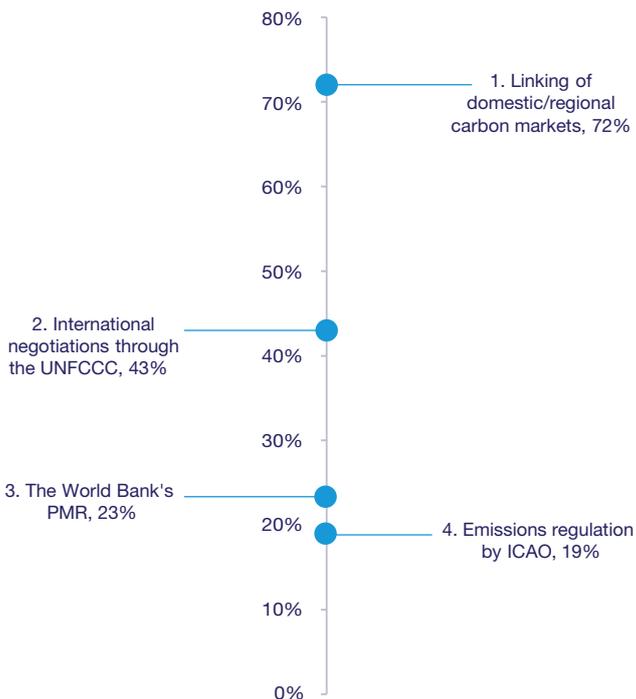
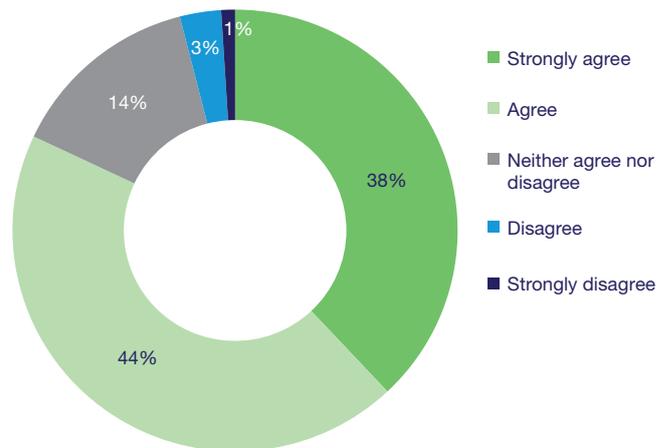


Figure 14: To what extent do you believe domestic initiatives to regulate emissions will be more important than the international negotiations over the next five years? (percentage of respondents)



# Private sector and the Green Climate Fund

“I fear the current market players will not be around to take advantage of the GCF as it is so slow to take shape.”

**The new UN financial mechanism – the Green Climate Fund (GCF) – may be an important channel for the flow of funding from developed countries in support of developing countries’ climate change adaptation and mitigation efforts.**

The current focus at the GCF is on basic institutional arrangements and governance. Important questions need to be answered on funding sources, the allocation of climate finance between various windows, and the mechanisms for disbursing those funds. Few respondents to our survey expect the GCF to become fully operational by 2015, but nearly all expect this will happen before 2020. Several members doubted whether the GCF would be effective when it eventually becomes operational.

An important goal of the GCF is to mobilise private sector capital for the climate change adaptation and mitigation activities that it seeks to fund. This could happen through having the private sector contribute directly to the fund through carbon market revenues or other earmarked taxes, or through financial instruments that leverage additional private sector investment.

Among respondents, concessional lending and credit risk guarantees were seen as the most effective tools in stimulating additional investment into climate change action. It is noteworthy that of the four options provided, grant funding was considered least effective.

At this stage however, survey respondents found it difficult to identify GCF-related opportunities for carbon market participants. More than half were not able to give a concrete example of how the GCF may provide them with business opportunities. Some others saw opportunities for certain market participants, such as offset project developers and project financiers, but clarified that the exact design of the GCF will be fundamental in shaping these opportunities. This lends weight to the view that private sector involvement in the development of the GCF is important to its success.

If discussions progress quickly, meetings of the GCF Board in June and September of this year may provide more clarity on the opportunities for carbon market participants.

Figure 15: When do you think the GCF will become fully operational and capable of channelling funds for mitigation and adaptation activities in developing countries?

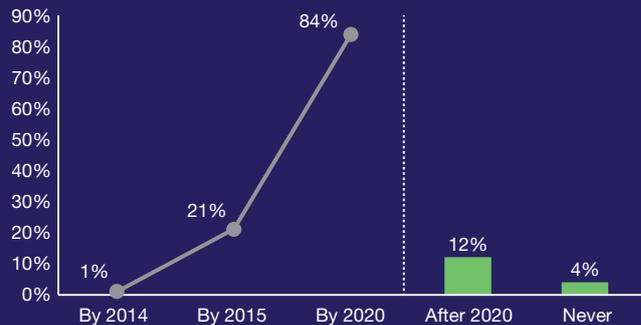
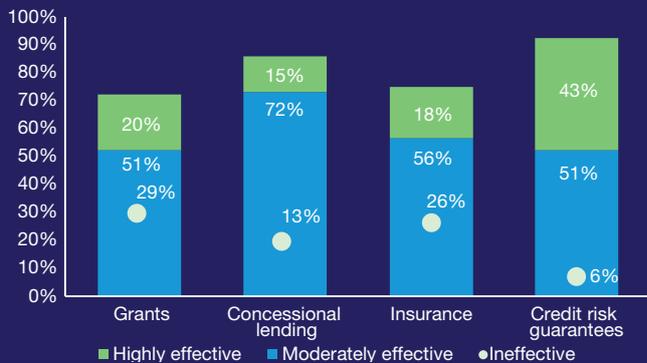


Figure 16: How effective do you think each of the following instruments would be in stimulating additional private investment in climate change adaptation and mitigation?



# New and emerging markets, sectors and protocols

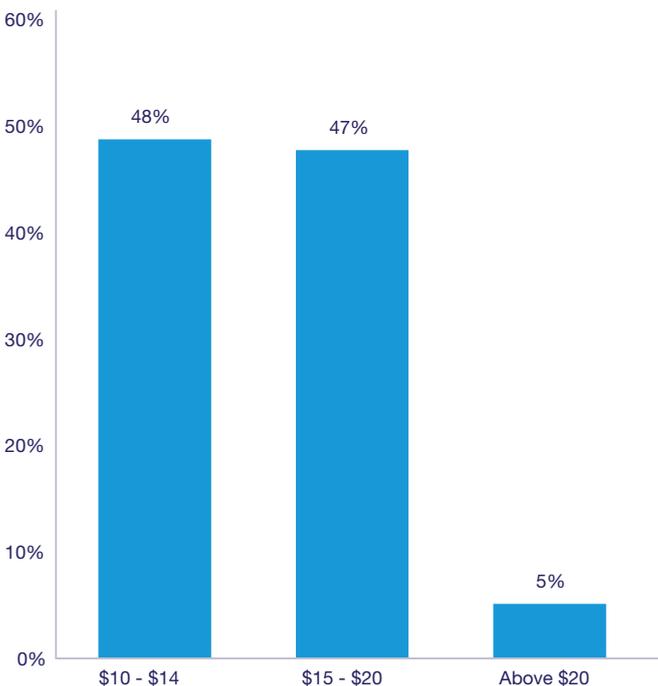
## New markets: California and Quebec

The start of 2013 saw the launch of sub-national cap and trade programmes in Quebec, and after a few legal challenges, California. During the first few months of the first compliance period, California Carbon Allowances (CCAs) traded between US \$14 and \$15.

Respondents expect CCAs to trade at a similar average price over the first three years of the scheme: the vast majority indicated they expect allowances to trade between US \$10 and US \$20. The split is even between those that believe it will be either slightly above or slightly below the current price of around US \$15. Few respondents expect a price of above US \$20, so for now the soft price ceiling of US \$40 is unlikely to have an effect.

Additionally, we asked whether respondents believe California's share of the global market will increase in terms of value. A significant majority of respondents indicated they believe this will be the case (75%) and only 9% believe California's share will decrease relative to the current level. The rest did not expect changes. This increasing prominence of the Californian market at the global level may be a consequence of both a maturing cap and trade programme in California and an expected decrease in the value of the EU ETS and CDM.

Figure 17: What do you expect will be the average CCA price during the first three years of the Californian cap-and-trade programme? (percentage of respondents)

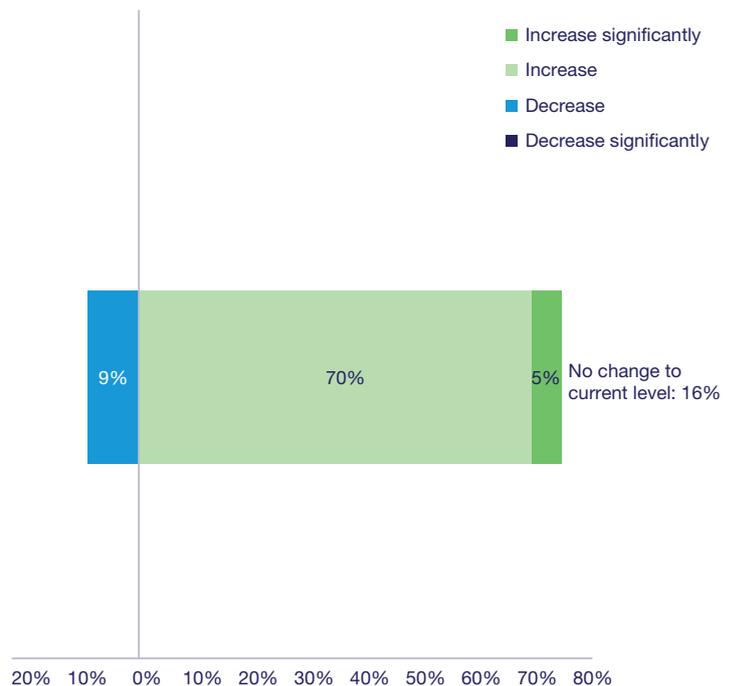


## REDD+ to be integral to the carbon market by 2020

There is wide agreement (84%) among survey participants that REDD+ will eventually be part of the carbon markets, either through an international UNFCCC-led mechanism or through domestic mechanisms. The California Air Resources Board (CARB) is one of the regulators currently looking into accepting these credits as offsets in their programme.

The majority (83%) of those that believe REDD+ credits will form part of future carbon markets, expect such credits to be available before 2020, and only 2% think this to be the case after 2030. Some (18%) even think REDD+ may be available as soon as 2015.

Figure 18: Do you believe the Californian share of the global carbon market will increase or decrease over the next 3 years in terms of value?



## Expanding regional schemes in the US and Canada

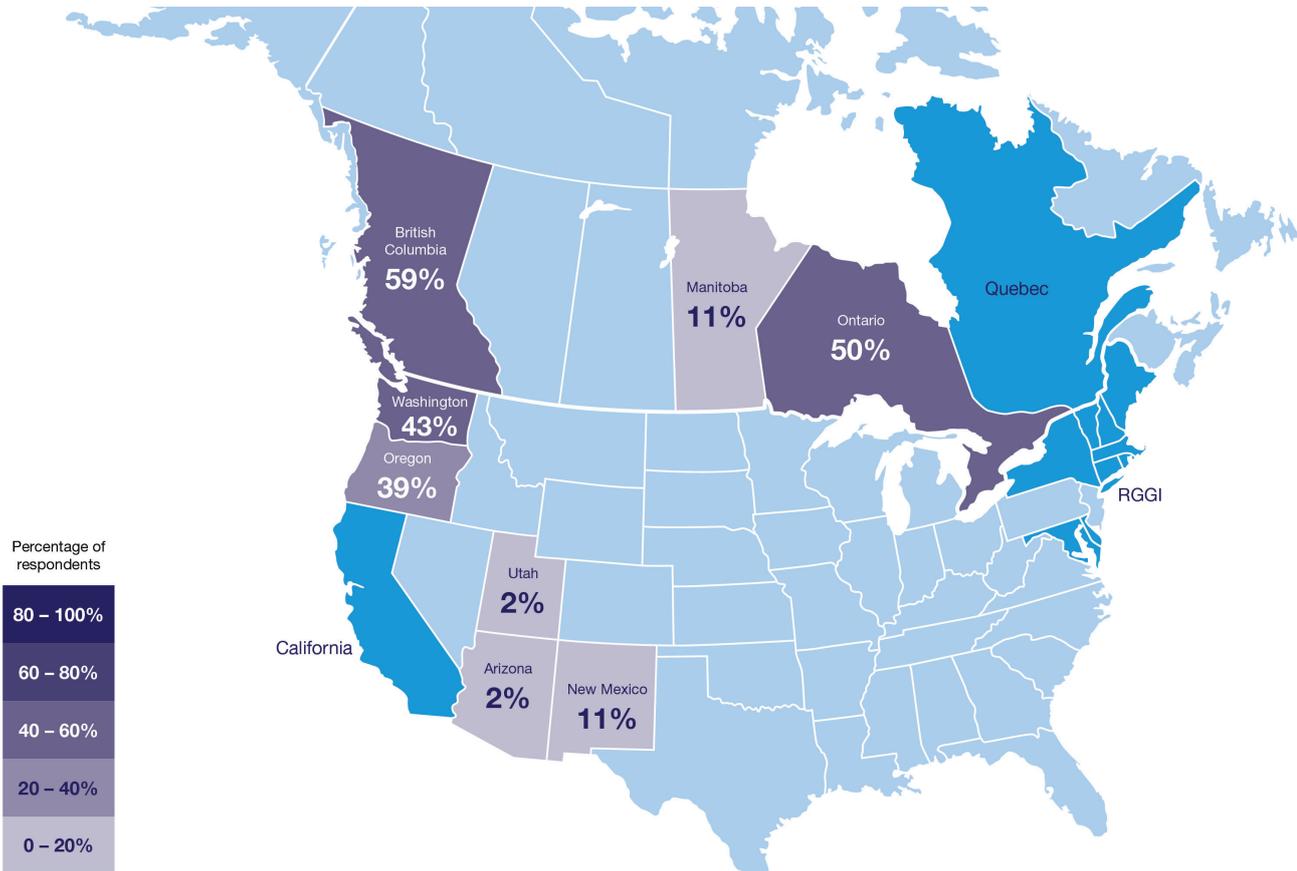
California and Quebec are set to link their carbon markets under the WCI umbrella in January 2014. We asked respondents whether they believed other provinces and states would join either of the two regional cap-and-trade schemes, the WCI and RGGI, in North America.

Respondents indicated that they considered it likely that the Canadian provinces of British Columbia and Ontario and the American states of Washington and Oregon join by 2020. This would lead to regional schemes smaller than originally intended, but still implies an expansion of the current size of carbon markets in North America. 23% respondents believe no other jurisdictions will join

either programme in the near future. Opinion was divided over whether WCI and RGGI would join forces and form a single North-American regional scheme. Three in five respondents thought this was likely to happen but 41% thought this was improbable before 2020.

Despite the positive outlook for expanding regional schemes in North America in the medium term, few considered it likely that a federal scheme would be introduced in Canada (32%) or the US (16%) before 2020. This stands in stark contrast to other countries (see next page).

Figure 19: How likely do you think is that any other American states and Canadian provinces will join WCI or RGGI in the near future?



## Asia on the move

A number of countries besides Europe, the US and Canada have started drafting plans and legislation to set up national cap-and-trade schemes. There is optimism among respondents that some of these markets will see their first implementation phase before 2020.

In particular, the results show confidence that various Asian economies will do so: China, South Korea, and Japan occupy three places in the top four positions of most likely countries.

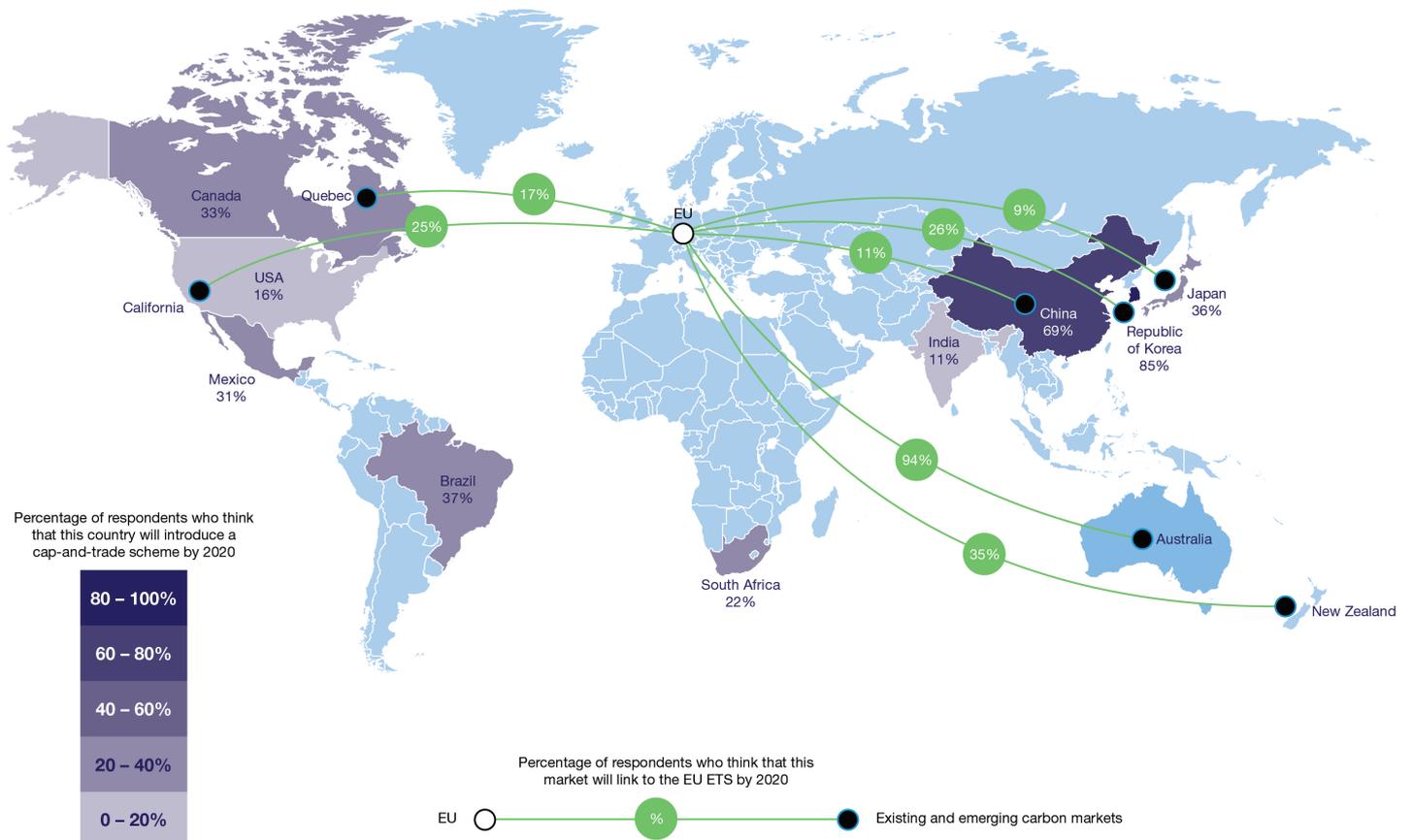
Several Chinese regions have been working towards pilot schemes, which will inform the design of a national market. However, most members thought that these emerging programmes would not be more ambitious than current schemes in Europe, Australia and California. Around 73% of respondents do not believe the caps for these pilots will be more stringent than existing schemes elsewhere.

For this reason, it seems unlikely prices will be high and the pilots may have a low environmental impact. However, they may contribute to building the institutional capacity required for a national cap-and-trade scheme in the near future.

Other countries that are expected to implement market-based regulation in the medium-term include Brazil, Mexico and Kazakhstan. South Africa and India are regarded less likely.

Of existing and emerging cap-and-trade schemes, only Australia and New Zealand are currently thought likely to link with the EU ETS in the future, with 94% and 35% of respondents indicating this, respectively. Indeed, Australia and the EU have already drafted plans to do so.

Figure 20: How likely do you consider that other countries implement national cap-and-trade schemes and link it to the EU ETS before 2020?



# What is next for aviation?

## The introduction of international aviation into the EU ETS this year was delayed in response to the formation of the High Level Group on Climate Change (HGCC) at ICAO.

In April, the EC adopted its 'stop the clock' decision, giving ICAO the opportunity to propose international regulation for the sector at its next General Assembly in September of this year.

Of respondents to this year's survey, 62% indicate they believe ICAO will propose an approach to global emissions regulation before 2018, 26% after 2018, and 12% believe it will not happen at all.

September this year will see the 38th ICAO Assembly, where the HGCC's proposals are expected to be voted on. The 37th Assembly in 2010 has already set out sustainability goals and outlined a framework for market-based measures.

Three options are being considered by ICAO:

- Mandatory offsetting;
- Mandatory offsetting with additional revenue-generating mechanisms; and
- A global cap-and-trade scheme.

If ICAO does not make sufficient progress in 2013, the EC has indicated that the EU ETS obligations will automatically resume international flights. Given trade and diplomatic tensions, this might be difficult to achieve.

For this reason, respondents revealed a variety of views on what would happen were ICAO to fail in enforcing measures. Some 40% of respondents thought the European Commission would reintroduce flights in the EU ETS, whereas 36% of respondents regarded this as improbable.

However, doubts remain over the current importance of the inclusion of international aviation to the carbon markets. Despite its potential to inject substantial demands into carbon markets if regulated globally, few respondents (19%) ranked such regulation as one of the two most important policy developments at the international level compared to the wider UNFCCC process and the linking of domestic cap-and-trade schemes.

Figure 21: By when do you think the International Civil Aviation Organisation (ICAO) will propose an approach to carbon emissions regulations? (percentage of respondents)

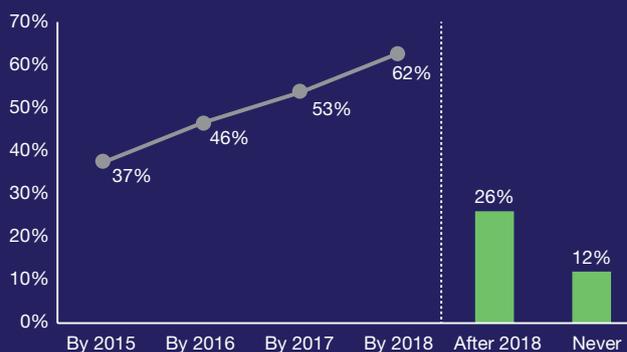
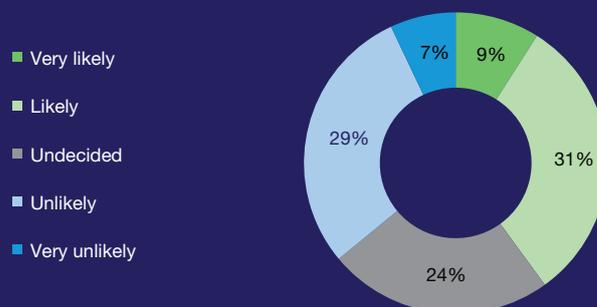


Figure 22: How likely do you think it is that the EU will eventually reintroduce international flights into the EU ETS if ICAO does not suggest an alternative form of regulation? (percentage of respondents)



# Low carbon prices: impacts on investment and employment?

“Capacity and expertise is being lost.”

**With a current EUA price of around €3.50 and expectations for that to increase to only around €10 on average for Phase III, we asked participants what they considered is the price required to achieve low carbon investment in line with a two degree target.**

There was a wide range of responses, with a range from €11 upwards, and an average mid-point of €47. Some even mentioned prices above €150 to drive the implementation of new technologies. As discussed earlier, the highest average price expectation recorded in this survey was €34 and dates from May 2008, before the economic downturn.

With this differential in mind, we asked survey participants about the extent to which the carbon price drives their investments decisions, and differentiated the results between those entities that are regulated under a cap-and-trade scheme and other market participants.

All of the regulated entities (energy and industrial companies) in our survey reported that the carbon price is still relevant to their capital investment decisions. For three-in-four of these entities, the carbon price is one of several important factors and some even indicate it as the single most important factor. However, over a fifth indicates it is rarely important.

Unregulated entities, such as service providers, however, may divert their attention elsewhere than the carbon markets. Some 14% indicate they currently have no investments planned. Only one in five are looking to invest in the EU ETS or CDM, though this rises to 37% by including those that also plan to invest in emerging markets such as California, Quebec and Australia. Others explore additional areas such as renewable energy and other commodities.

These investment patterns that divert away from the carbon markets are however not reflected in employment decisions. The vast majority (71%) say they do not plan changes to their carbon markets-related employment, and equal numbers are considering expanding and reducing over the medium-term (14%).

Figure 23: What do you believe is a meaningful carbon price to drive low carbon investment in line with a 2 degrees target? (percentage of respondents)



Figure 24: For entities not regulated under a carbon trading scheme: what areas of investment are you looking at? (percentage of respondents)

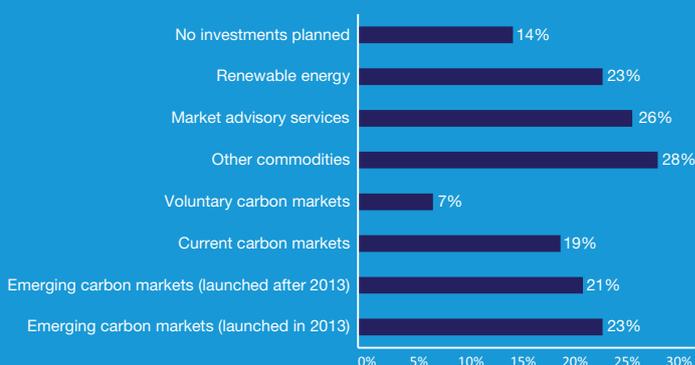
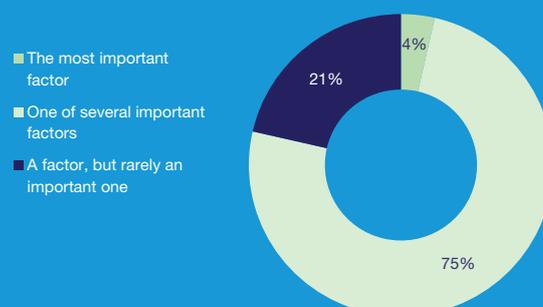


Figure 25: For entities regulated under a carbon trading scheme: how important are carbon markets (or climate policy) in influencing your capital investment decisions? (percentage of respondents)



## Survey methodology

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This 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 31 multiple choice questions. Respondents were able to leave questions blank if they did not want or were not able to answer particular questions.

The survey opened on 1 May 2013 and was live for two and a half weeks, closing on 17 May 2013. Three reminders were sent out by email between these dates to increase the response rate. Additionally, phone calls were made to a select number of members to encourage them to respond before the deadline.

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 15 May 2013.

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.

First, the sample size may differ between results, due to questions left unanswered.

Secondly, since the 1st edition of the survey in 2007, 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 5th and 6th edition of the survey, to include a wider range of greenhouse gas market participants and observers. The 7th survey, in 2012, was based on semi-structured interviews with key IETA members. This year, the original approach of surveying IETA members only was readopted.

Lastly, several questions in the survey gave participants the possibility to select multiple answers. Hence, not all percentages displayed throughout this report add up to one hundred per cent.

## Acronyms

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<b>CARB</b>	California Air Resources Board
<b>CCA</b>	California Carbon Allowance
<b>CDM</b>	Clean Development Mechanism
<b>CER</b>	Certified Emission Reduction
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>COP</b>	Conference of the Parties
<b>EC</b>	European Commission
<b>EP</b>	European Parliament
<b>ERU</b>	Emissions Reduction Unit
<b>EU</b>	European Union
<b>EUA</b>	European Union Allowance
<b>EU ETS</b>	European Union Emissions Trading Scheme
<b>GCF</b>	Green Climate Fund
<b>GHG</b>	Greenhouse gas
<b>HGCC</b>	High Level Group on Climate Change
<b>ICAO</b>	International Civil Aviation Organization
<b>IETA</b>	International Emissions Trading Association
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>NMM</b>	New market mechanism
<b>PMR</b>	Partnership for Market Readiness
<b>PWC</b>	PricewaterhouseCoopers
<b>REDD+</b>	Reducing emissions from deforestation and forest degradation, plus conservation, sustainable forest management, and carbon sink enhancement
<b>RGGI</b>	Regional Greenhouse Gas Initiative
<b>UN</b>	United Nations
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>WCI</b>	Western Climate Initiative

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## IETA: Advancing market solutions for climate change

The International Emissions Trading Association (IETA) is a non-profit business organization 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 emissions trading systems around the world.

Further information is available at [www.ieta.org](http://www.ieta.org)

