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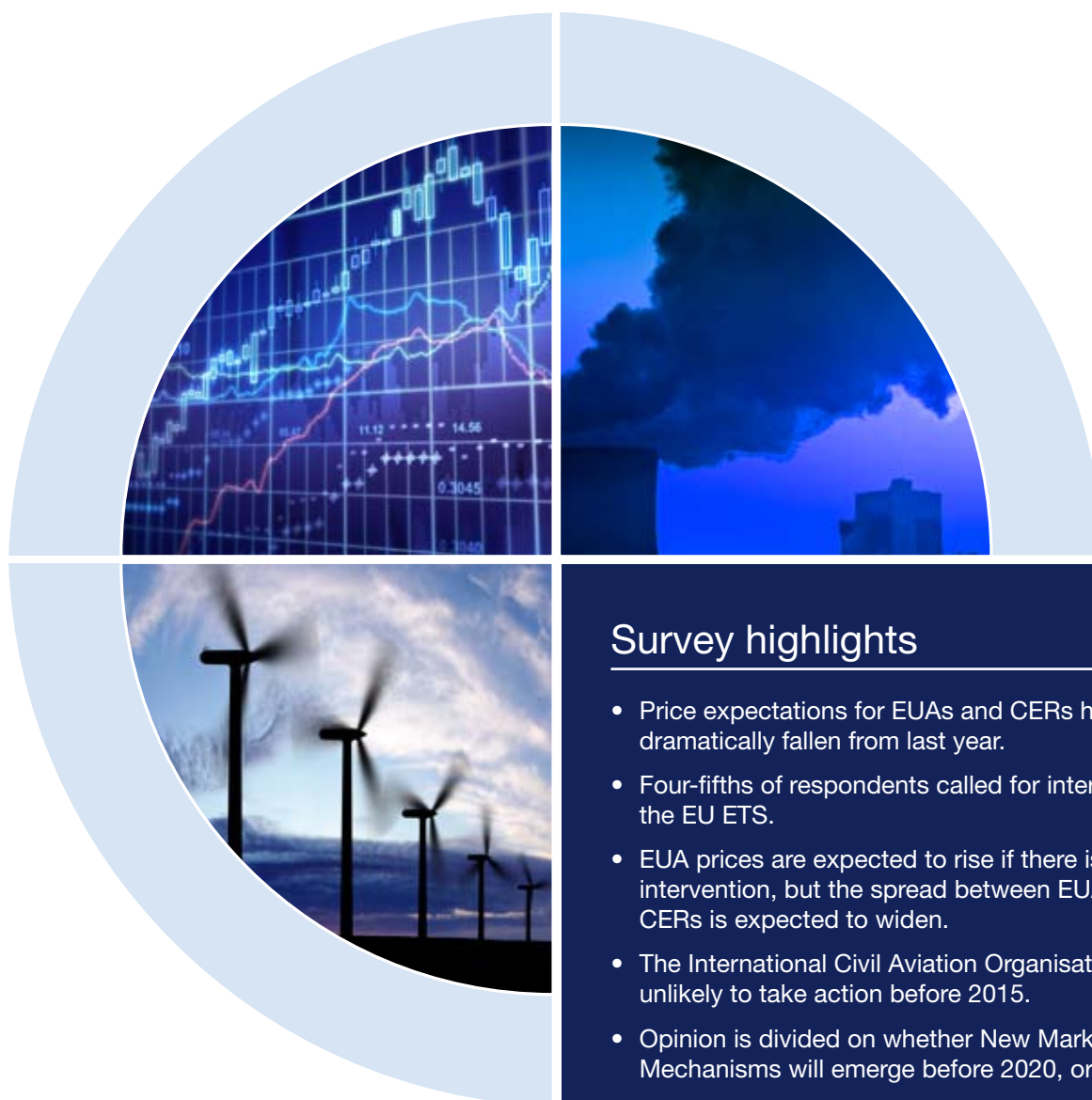
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CLIMATE CHALLENGES, MARKET SOLUTIONS

GHG Market Sentiment Survey

2012, 7th Edition

A survey of current GHG market sentiment
This year based on in-depth interviews



Survey highlights

- Price expectations for EUAs and CERs have dramatically fallen from last year.
- Four-fifths of respondents called for intervention in the EU ETS.
- EUA prices are expected to rise if there is intervention, but the spread between EUAs and CERs is expected to widen.
- The International Civil Aviation Organisation is unlikely to take action before 2015.
- Opinion is divided on whether New Market Mechanisms will emerge before 2020, or after.
- Over half our respondents expect federal action on emissions in the US will take place before 2020.

Conducted by:



Survey highlights

Key findings of the seventh IETA GHG Market Sentiment Survey:

- Price expectations for EUAs and CERs have fallen from last year, in line with market values.
- Durban has shored-up confidence in the carbon markets: CDM lives to see another commitment period and market mechanisms are endorsed. Expectations for the outcome of the negotiations in 2015 are mostly for voluntary emissions reductions targets that aim for 2 degrees warming.
- The vast majority called for intervention in the EU ETS. The three best options were thought to be a move to the 30% emissions reduction target for 2020, a permanent set aside of allowances or an auction reserve price.
- Intervention is broadly expected, boosting demand for EUAs. This might not feed through to CER demand though – widening EUA-CER spreads and delinkage are expected.
- The International Civil Aviation Organisation is unlikely to take action before 2015 to defuse political tension on aviation, but the International Maritime Organisation may take action on shipping.
- Fraud in the markets may have undermined the credibility of emissions trading as a policy outside the EU.
- Hopes are high that viable carbon markets will emerge around the world, representing a significant source of demand for offsets. Some of these new markets could link up before 2020.
- More than half our respondents expect that the US will take federal action on GHG emissions trading before 2020.
- Respondents are divided on whether New Market Mechanisms will emerge before 2020, or after. Governments need to do more work on how these mechanisms are defined and will operate, otherwise private sector investment will be limited.

The 2012 IETA approach to GHG Market Sentiment

This year's survey reflects topical issues and key developments in the greenhouse gas (GHG) market over the previous 12 months. The survey was conducted by carrying out a number of interviews. The survey has been designed to complement, rather than duplicate, other carbon market surveys that are conducted during the year. Unattributed quotes from these interviews are included throughout this report.

About this report

The interviews were conducted by IETA as well as on behalf of IETA by the PwC UK Sustainability and Climate Change team.

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Message from the President and CEO of IETA

Around the world, emissions trading had its ups and downs in 2011. Over the past 12 months, carbon market and finance professionals continued to weather storms caused by major economic challenges – particularly as Europe struggled with recession and national economic crises. Although carbon prices reflect the lower demand resulting from these challenges, the market not only continued to operate – but it was also boosted by encouraging developments in new regions that have passed laws to put in place emissions trading systems.

In the minds of industry, the idea of emissions trading is very much alive. It offers businesses flexibility to apply the low carbon investment strategies and technologies that make the most sense in their unique situations. IETA and other friends of emissions trading have a job to do to help find a politically realistic and economically rational restatement of the reasons to adopt these ideas in policy – and to do so in many different languages. The long-term view remains robust, because we know that if our carbon-constrained world is going to take steps to seriously address climate change, there is simply no more cost-effective way than market mechanisms that create business incentives to reduce carbon emissions. This survey reflects those views.

IETA is delighted to present the 2012 edition of our GHG Market Sentiment Report. For the first time it is based on select structured interviews with emissions trading and climate finance professionals conducted over the weeks leading up to Carbon Expo in June 2012. This is our seventh survey of the views of the carbon market worldwide, and we believe these results provide an important barometer of carbon market and climate finance opinion - not only of past and current performance, but expectations of the future from the people who will shape that future.

The survey goes beyond straightforward market sentiment, however. It covers a range of important policy and investment related issues that will impact on market design issues all around in 2012 and beyond. These include the role and future of the Kyoto Protocol post 2012 and the Durban Platform, changes and new sectors in the EU ETS under Phase 3, the emergence of the Green Climate Fund, developments in emerging carbon markets from a variety of countries ranging the world over, and the creation of new market mechanisms.

IETA's membership and outreach covers a broad spectrum of participants from all parts of the emissions trading and climate finance industry in order to make us impartial between sectors, and ideally placed to give a broad view. The survey was conducted over a six-week period and jointly undertaken by the IETA Secretariat and the PwC UK Sustainability and Climate Change Team. We have polled individuals from around the globe for their views, reflecting the expanding nature of international climate politics and broader interest in the carbon markets and climate finance.

The report coincides with Carbon Expo 2012. IETA's reports, working groups, and global conferences continue to help carbon markets perform a vital public policy task for which they have been created.

I hope that you will find the report and results of the survey as useful and enlightening as I have. We always welcome all views and suggestions for improving this work, so we encourage your feedback.



Dirk Forrister
President and CEO of IETA

30th May 2012

In May 2011, our survey reflected on the uncertainty surrounding the future of the Clean Development Mechanism (CDM), the United Nations Framework Convention on Climate Change (UNFCCC) negotiations, the incidences of fraud in the European Emissions Trading Scheme (EU ETS), and on the Commission's decision to restrict eligibility of offsets from certain countries and technologies. Expectations for Phase 3 were of European Union Allowance (EUAs) trading at around €30, and Certified Emissions Reductions (CER) around €24.

Carbon traders have good reason to be nostalgic. In the past 12 months the headline issues have changed dramatically. While Durban may have resolved the uncertainty surrounding the future of the CDM, there was increasing consensus that the EU ETS was structurally long. At least there have been no further reported instances of fraud or theft in the markets. As analysts competed to release ever more pessimistic assessments of the situation, the EUA price began a downward spiral. The CER price swiftly followed, and CDM developers have had to contend with the reality of a €3 market.

This year, all eyes are on Brussels. Both Commission announcements and the policy stances of EU Member States are intensely scrutinised for signs that the Union will move to a 30% emissions reduction target, or else 'set aside' some allowances. Really for the first time, the market moved away from trading mostly on energy market fundamentals, and instead on Eurozone growth worries.

The past year also witnessed a diplomatic spat over the inclusion of aviation in the EU ETS. Despite being announced years earlier, a 'coalition of the unwilling' formed in late 2011 in response to this decision. A case in the European Court of Justice against the inclusion of the non-European airlines failed, but strongly worded statements persist from the coalition, along with some major countries mandating their airlines not to comply.

However, even as Europe has dominated headlines and prices in 2012, the future of the carbon markets is now being determined in other countries.

In Asia and North America, we have witnessed a string of positive announcements and legislative achievements. Sub-national schemes in California and Québec are gathering pace, and Australia is gearing up to implement a pre-trading carbon tax this year. South Korea and Mexico both passed substantial bills in April 2012 to establish trading schemes that support national emissions targets. China has seven regional pilot schemes now aiming for operation in 2013 and onwards.

At the United Nations (UN) level governments are discussing possible successors to the CDM. 'New market mechanisms' could provide a credible complement to, and eventually replace, the CDM, although this will require significant progress on definitions and legal frameworks.

The emergence of new markets and steps towards new market mechanisms are undoubtedly good news for two reasons. Firstly, they provide evidence that ambition from many parties that the world needs to tackle climate change is growing. Secondly, they highlight that carbon markets are still a favourite policy option to achieve this ambition.

The price of carbon over the last year has largely been set in the EU. EUAs fell 61% from €17.82 to €7.05: a direct response to the oversupply of allowances in the market. Secondary CERs (sCERs) suffered an even worse decrease of 70% over the same period, from €12.88 to €3.83 April 2011 to April 2012. The markets largely brushed off Durban. After a minor bounce in EUAs on the outcome of the talks, the decline in prices continued given Eurozone growth worries.

In contrast, Californian pre-compliance contracts have fluctuated between \$13 and \$23, peaking at \$23 in September, and remained broadly stable at \$14-15 in 2012.

It is against this background that we have conducted our seventh survey of GHG Market Sentiment.

Durban: a victory for the process or the climate?

Half of respondents felt that the outcome of Durban was positive for the carbon markets, and a further two in five respondents neither agreed nor disagreed that Durban was positive for the markets. This former group highlighted three factors to support their position:

1. By deciding to extend the Kyoto Protocol, the negotiations ensured the continuation of the CDM through a second commitment period, removing some uncertainty in the market. In the agreement on long term cooperative action, governments endorsed the role of market mechanisms.
2. The conceptual agreement on new market mechanisms moves the UN process towards complementing bottom-up mitigation action.
3. The commitment to draft an agreement with legal force to reduce emissions was adopted by all countries. This was especially significant as the distinction between Annex I and non-Annex I countries was removed.

“Negotiations didn’t kill the markets as some had suspected. Support for having a broader carbon market was there, thus it was positive.”

“Breaking the barrier between developing and developed countries will take the wind out of the sails of the US [to do nothing] ... if China participates, US will be isolated.”

The two respondents who thought that the outcome was negative believed:

- that the market had simply not responded appropriately to the outcome:
“Durban should have been more positive for the markets: they didn’t understand its significance”

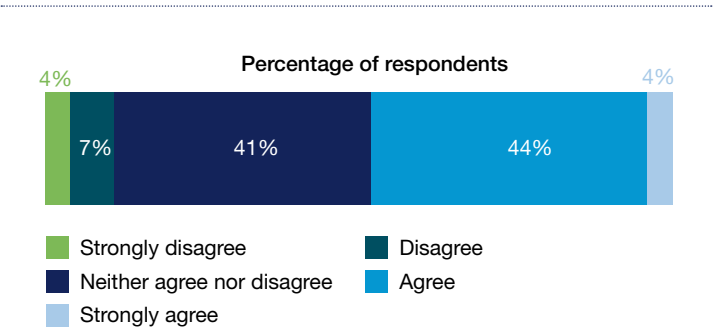
- that the negotiations had failed to achieve anything concrete:
“Durban did not offer any commitment from anyone, consequently carbon prices have been going down ever since.”

Looking forward to 2015: COP 21

Half of all respondents thought that any commitment agreed in 2015 would be based on the 2°C goal. But some indicated that although “parties won’t explicitly renege 2°C”, the reality of the emissions reduction pledges would commit the planet to much greater warming (i.e. between 4 and 6°C.) On the legal form of the agreement in 2015, two in three thought it would take a voluntary form (like the Durban Platform), and fewer than one in ten that it would be legally binding.

However one in five respondents chose to elect for neither a legally binding nor a voluntary agreement. Instead they suggested there may be some form of hybrid, or simply that the choice seemed arbitrary, given that “it’s easy to make ‘legally binding’ targets when there is no compliance framework in place.” In other words there is no force behind these international environmental treaties, so it makes no difference whether they are legally binding or not

“The outcome of COP17 in Durban was positive for the carbon markets”. Do you agree with this statement? (N=27)



Green Climate Fund

A large majority (nearly three-quarters) did not think it likely that US\$30 billion annually by 2020 could be raised from the carbon markets and taxation.¹

“US\$30 billion annually? Dream on.”

Among the reasons for their scepticism, respondents cited market values being too low, and the fact that even if the figure could be raised, it could not be hypothecated. The widely held view was that nations are still uneasy hypothecating revenue for a UN fund.

A handful of respondents instead estimated the real funds that will be made available to the GCF through carbon markets and taxation would range between \$5 and \$15 billion, with \$5 billion being the most commonly stated.

Further to that, one respondent believed that the GCF Board is poorly structured, and governments insufficiently qualified to run it.

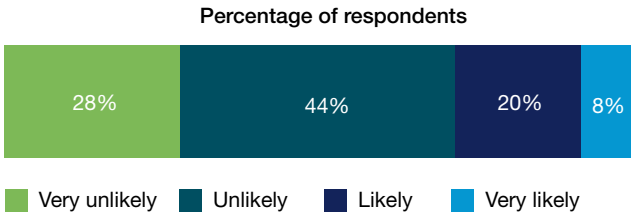
Fewer than one in three respondents was optimistic. One respondent thought that \$30 billion annually was likely on the condition of international transport (aviation and shipping) being subject to carbon pricing.

Action outside UNFCCC

A small number of respondents foresaw growth in carbon trading and emissions reductions efforts outside of the UN process or EU. More concretely, one respondent highlighted the work that the Japanese government is doing on Bilateral Offset Credit Mechanism (BOCM), which could operate independently of international emissions targets and agreements. It was further added that other governments in the region are taking a strong interest in the BOCM framework.

This was supported by our findings (see section 4 – New markets) that, although it was generally not expected that Japan would emerge as a viable carbon market before 2020, it was seen as likely to become a significant net offset purchaser.

How likely are the carbon markets and carbon taxation to raise \$30 billion annual under the Green Climate Fund by 2020? (N=25)



¹ The UN GCF suggests that around this amount could be raised by 2020 “based on a carbon price of \$20-25 per tCO₂e, auctions of emissions allowances and domestic carbon taxes in developed countries with up to 10% of total revenues allocated for international climate action”.

Prices

Just over two-fifths of respondents thought that the Phase 3 EUA price is most likely to lie in the €11-20 range, while just under two-fifths opted for €21-30. The average price expected was €19.23; a 37% fall on last year's €30.67.

Qualifying the expectation of more than doubling on current spot prices, respondents assumed that:

- The European economy would recover; and,
- The Commission would act to either set aside a substantial volume of allowances or else increase the EU-wide target from a 20% to 30% reduction of emissions on 1990 levels by 2020.

Those who had expectations in the single-figures were correspondingly pessimistic on (or unsupportive of) any market intervention.

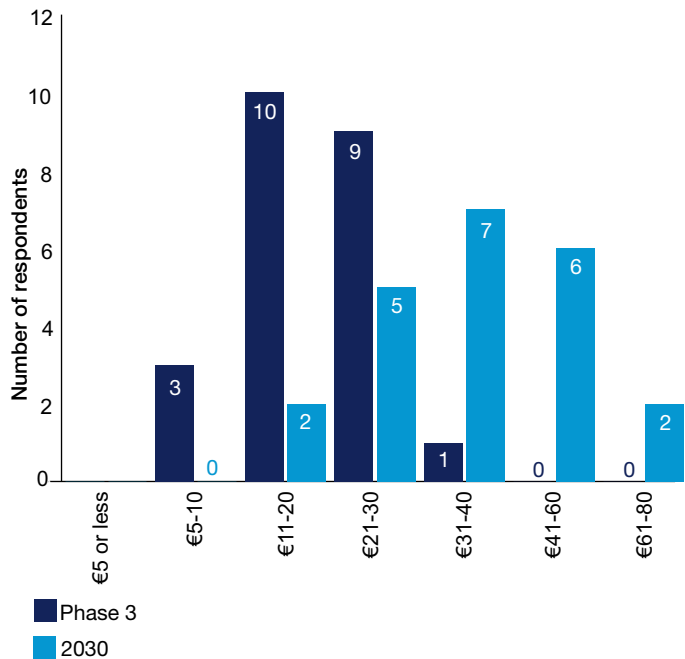
In the long term, respondents expected the EUA price to be stronger; €38.22 on average by 2030. The €31-40 range was the most commonly selected.

Time for market intervention?

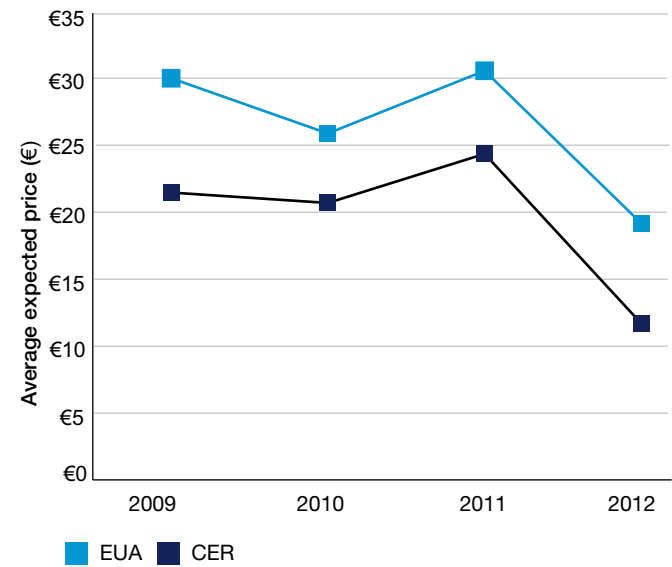
Views differed on whether the Commission should act on relatively low prices – respondents fell into two groups: market purists and market interventionists.

Purists argued that the low market prices indicate that “it’s easy to hit the greenhouse gas reduction targets you set”, and that this is the correct price signal to investment, given the state of the economy. Intervention risks undermining the very philosophy of the market, according to this school. Overall, purists were in the minority; accounting for a fifth of answers.

EUA price expectations 2012 (N=23)



The average Phase 3 EUA/CER price expectation (previous IETA surveys 2009-2012)

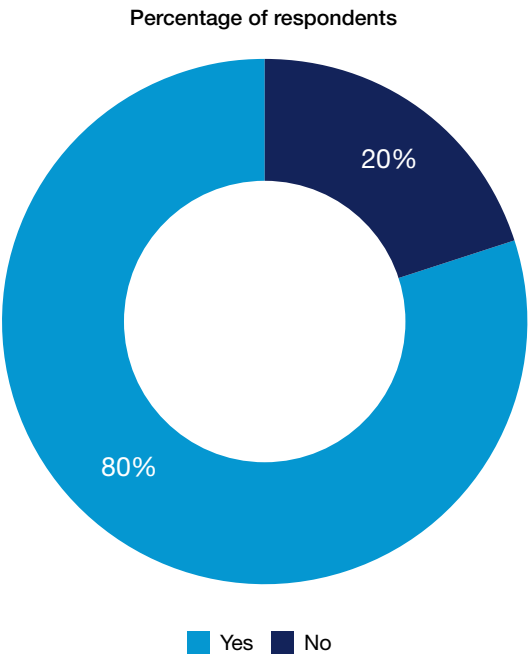


Interventionists (four in five respondents) all argued that the EU should attempt to boost prices to stimulate long-run investment, but differed on how to achieve this. However, many respondents agreed that intervention should be transparent and seen to be apolitical. One respondent from the financial sector linked this issue with that of eligibility restrictions in 2010. Following these, investors have become sensitive to unexpected policy moves that could damage investment returns, so further moves should be predictable and justifiable.

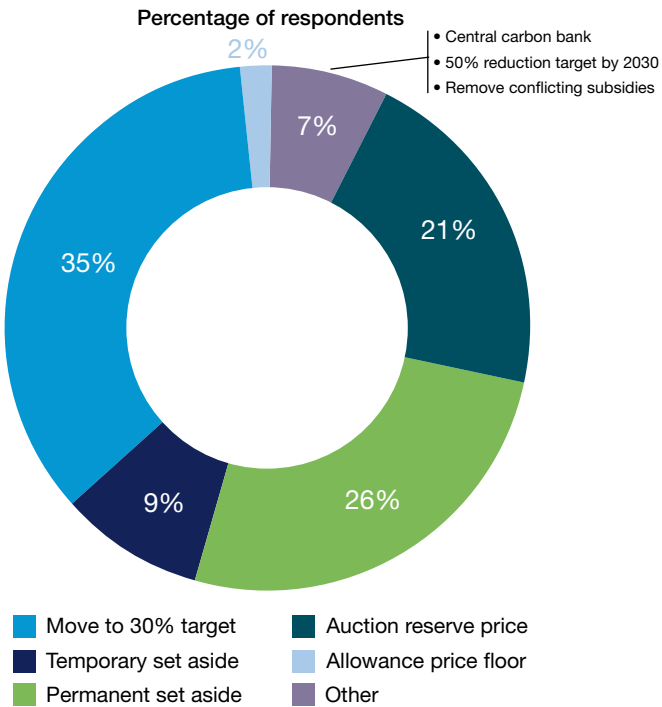
“Now the EU has shown that it can be capricious, investors have learnt a lesson ... it’s imperative not to turn the market into a casino.”

A move to the 30% target by 2020 was the preferred option (two in three interventionists), followed by a permanent set aside (almost half) and an auction reserve price (one in three). Other options volunteered by respondents included a carbon central bank, and a legally-binding emissions target of 50% for 2030. Some dismissed a temporary set-aside, as “failing to alter the fundamentals of supply and demand in Phase 3”.

Should EU governments intervene to support the EU Allowance price? (N=25)



How should EU governments intervene to support the EU Allowance price? (N=20)



Transport

Given international opposition, some market participants are no longer taking for granted the inclusion of aviation in the EU ETS. In general, our respondents felt though that it was unlikely airlines would refuse to comply, given that Directive's passage into law, or that the inclusion of aviation could ignite a trade war.

“Even if governments object, airlines need their permits to land.”

Most respondents were also sceptical of the ability of the International Civil Aviation Organisation (ICAO) to act decisively before 2015, with four in five ranking this option least or second least likely. This was partly explained in terms of the organisation's need for a two-thirds majority.

Respondents considered it more likely that airlines would mostly comply and that national governments would continue to negotiate face-saving bilateral treaties. Nearly four in five respondents thought that these 'equivalent measures' were the most, or second most likely, outcome before 2015.

What lessons did this hold for GHG emissions regulation of shipping sector, which the EC has been publicly consulting on this year?

Nearly half of the respondents thought that the most likely outcome is the International Maritime Organisation (IMO) taking action before 2015 beyond the energy efficiency regulations already announced. Failing this, half of these respondents thought nothing could happen, given the experience with aviation.

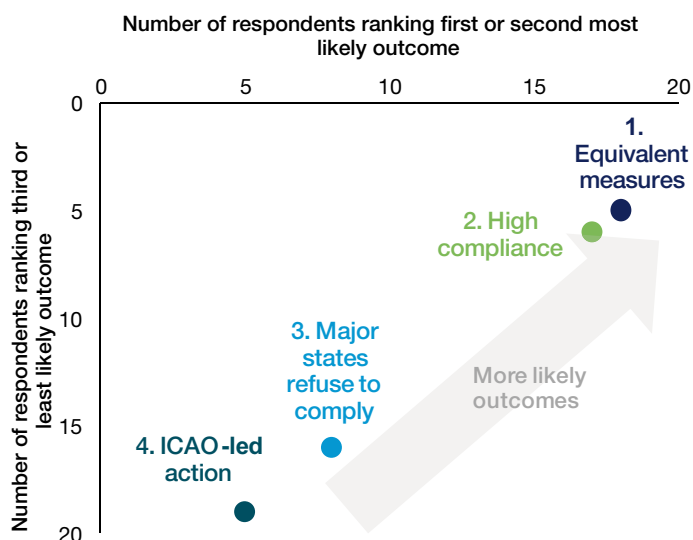
“There will be international action or no action.”

A small number of respondents (two in five) thought the shipping sector joining the EU ETS or an alternative carbon or fuel tax was the most likely outcome. However, practical objections on taxing fuel at EU ports were raised, and the experience from aviation was felt to mitigate against more substantial carbon taxation. A stand-alone shipping trading scheme was rarely considered likely (ranked fifth by just over one-third of respondents).

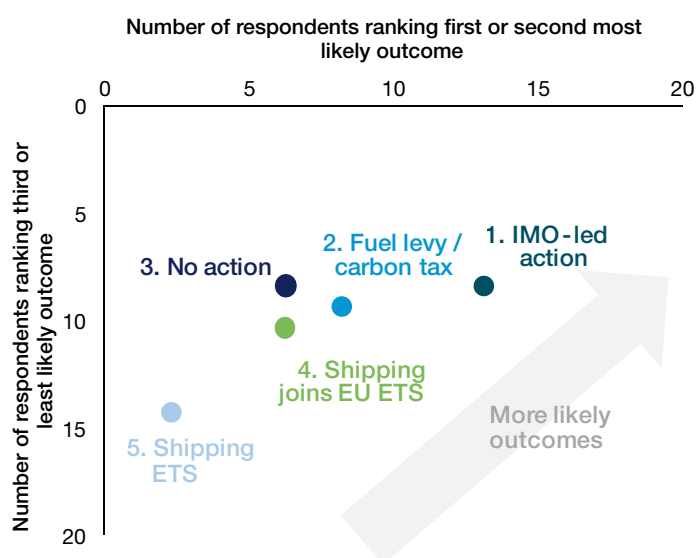
“The lesson from aviation is that cross-jurisdictional regulation is a political no-go.”

The more palatable alternative of a more stringent EU energy efficiency regulation was also proposed as a potential outcome.

Aviation: Rank the following outcomes in terms of most (Rank 1) to least likely (Rank 4) to occur before 2015. (N=24)



Shipping: Rank the following outcomes from most (Rank 1) to least (Rank 5) likely before 2015. (N=21)



Fraud

Although opinion was both divided and nuanced, overall half of our respondents thought that the VAT or ‘carousel’ fraud witnessed in the EU ETS in 2009, and the thefts in early 2011 would have a long term impact on emissions trading.

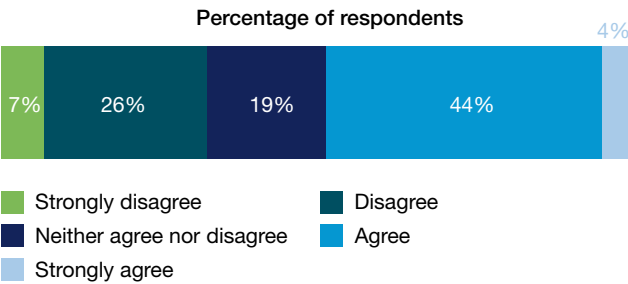
However, although nearly half agreed or strongly agreed with the statement, most did not believe that fraud would directly impact trading operations or even prices. Indeed, “by itself the fraud wouldn’t have had any impact”, argued one respondent.

Rather, the concern was that headlines screaming “Fraud!” would damage the credibility of carbon markets in other countries currently considering carbon regulation. Given the anti-market backlash following the financial crisis, it was felt that fraud could be cited to undermine the political case for emission trading, in favour of taxation.

Two-fifths took a neutral stance, and one-third disagreed with the statement that fraud had a long term negative impact on markets.

“Fraud? Storm in a teacup.”

To what extent do you agree or disagree that fraud has had a longer term impact on emissions trading? (N=27)



Prices and volumes

Compared to previous years, respondents were overall slightly pessimistic about CER prices. Expectations were that they would strengthen in Phase 3 from their current level to an average of €11.72, where the €5-10 and €11-20 ranges were thought most likely by four in five people (see chart in section 2 – International action on climate change).

Despite low price expectations, about two-thirds thought that CERs would continue to dominate the offset market (i.e. constituting 80-100% of volumes) in 2015.

Looking forward to 2030, CER prices were expected to strengthen slightly, with half selecting the €21-30 as being the most likely price range; €21.68 was the average. However two in five of those asked opted out of answering this question, qualifying their decision by elaborating on their doubts about the CER's continuation that far in the future. This reflects the earlier statements made around the uncertainty of outcome in the 2015 UNFCCC negotiations, which would likely influence the CER price significantly.

The differing expectations for CERs and EUAs (see section 2– International action on climate change) imply that the spread on average is expected to widen from current

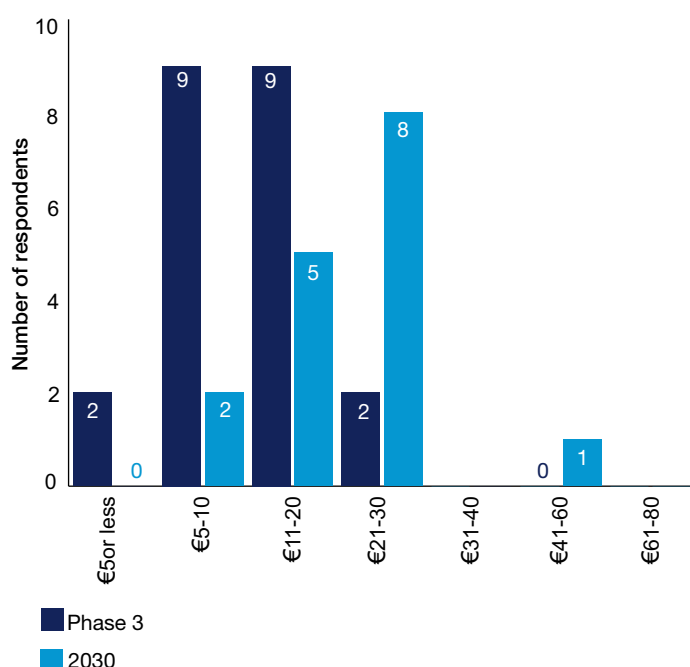
levels. We explicitly confirmed this expectation with respondents; four in five agreed that this may indeed be the case. Generally, it was expected that EUA demand would pick up but as the CER supply overwhelmed the amount allowed in the EU ETS for compliance (even after eligibility restrictions), prices would diverge. It was further added that the correlation may weaken as alternative drivers of CER demand emerge.

“At some stage it may be Australia that sets the price of CERs, not the EU.”

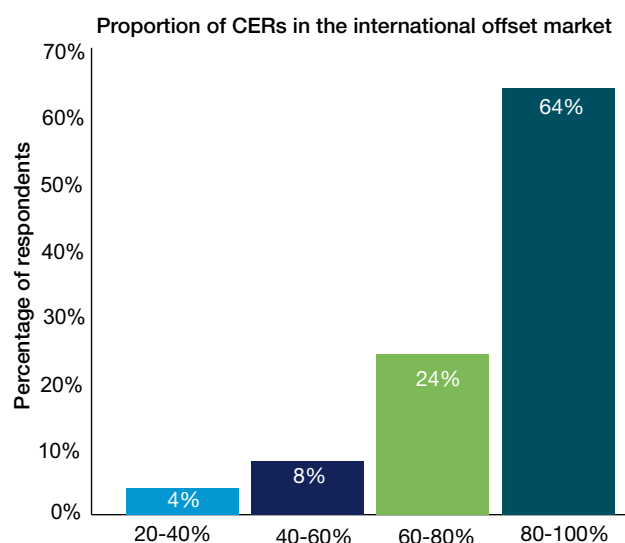
One respondent highlighted the role of the CER surrender tax in Australia in determining how strongly the Australian market would drive the CER price.

Another respondent also suggested that market players may no longer talk of ‘the spread’. Rather, multiple tranches of CERs will exist (reflecting different classes of CERs, depending on their eligibility in different compliance markets), each with their own price. Furthermore, the spread will no longer always be quoted against the EUA price as this becomes an irrelevant benchmark for ineligible credits. Broadly this is already manifest in market commentary on ‘green CERs’ versus ‘grey CERs’.

CER price expectations 2012
(N=16-22)



What will the proportion of CERs in the international offset market be in 2015? (N=25)



CDM drivers

More than four-fifths of respondents thought that the CDM Executive Board reforms and the potential for the CDM to be used as a domestic offset mechanism (e.g. in China) would have a positive impact on levels of CDM investment. On the other hand, four in five thought that the EU's eligibility restrictions would have a negative or significantly negative impact. Most respondents (over half) thought that the inclusion of Carbon Capture and Sequestration (CCS) would have no impact.

Respondents indicated that in 2020 a large number of countries would be supplying CDM and other carbon offsets to the international market. More than half of respondents selected Africa (excluding South Africa), Brazil, Indonesia and South East Asia as suppliers. More than half of those who selected Indonesia as being likely

to become a significant net offset provider, said this would be due to credits from forestry. Some indicated that these markets would become providers only subject to demand in relevant compliance markets.

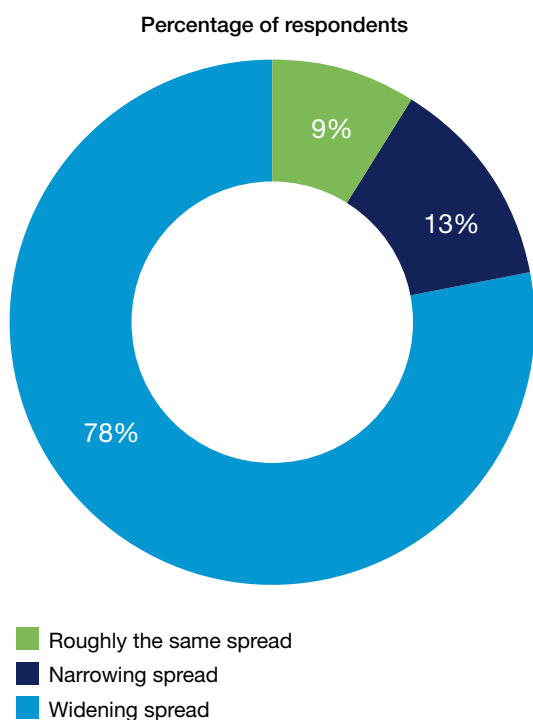
“There’s going to be a redrawing of the map, with Africa and forested nations becoming much more visible.”

Surprisingly, given China’s current dominance of the CDM market, only two-fifths selected China as a major supplier. With China’s economic development, respondents suggested that other countries would decreasingly want to buy there in future.

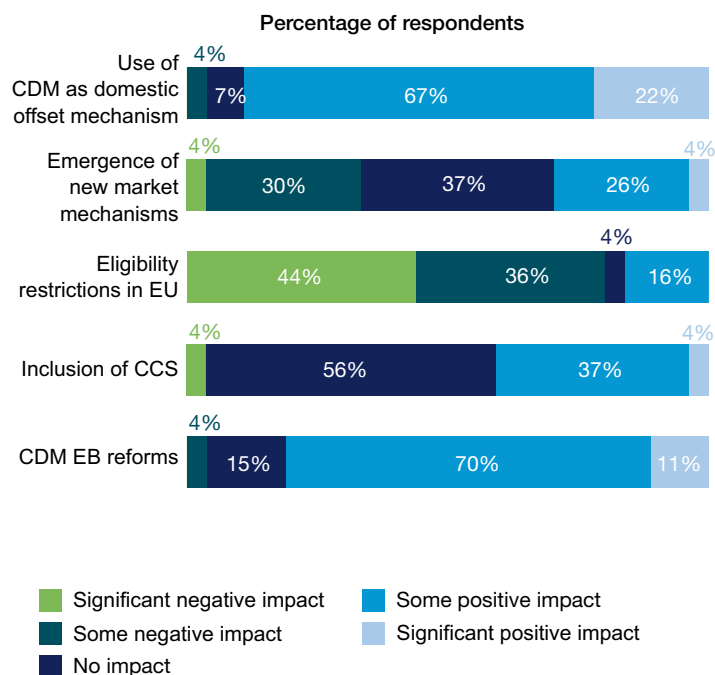
No-one thought Russia would be supplying offsets by 2020.

“Russia isn’t playing the game.”

Do you expect the spread between CERs and EUAs to widen, narrow or stay roughly the same? (N=22)



What level of impact will the following have on investment levels in CDM projects over the next five years? (N=27)



Lessons for future mechanisms

This year, we asked our interviewees if there were any key lessons from the CDM that should be applied to future offsetting mechanisms.

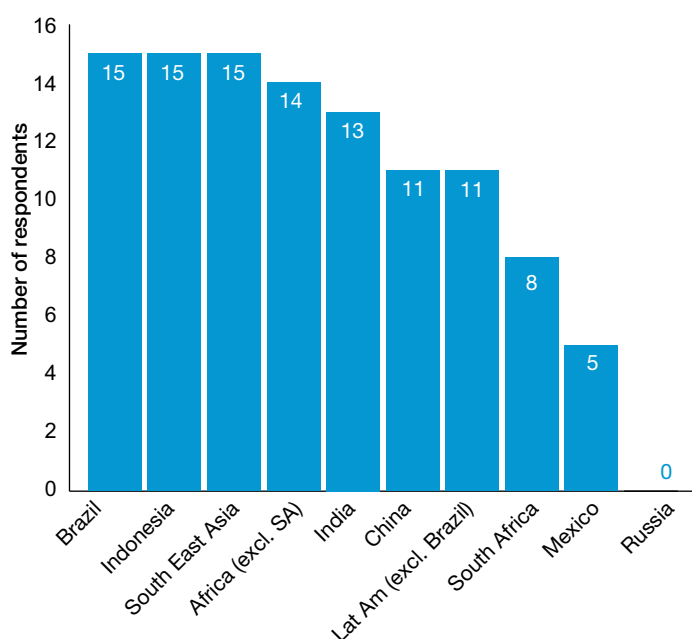
A key point was the importance of balancing rigour with practicality. Respondents argued that while a “tonne must be a tonne”, a huge proportion of projects never get off the ground due to the criteria stringency in the rules. One might draw the opposite conclusion from current criticism of the CDM (that to boost the market, criteria need to be tightened).

“The CDM is too picky ... the best can be the enemy of the good.”

It was suggested that standardised baselines, which lower transaction costs, and other innovations are essential to managing this conflict. Any mechanism that allows top-down monitoring and evaluation will help stimulate project development.

One respondent argued that there was a missed opportunity with CDM for technology transfer from the EU. This could be capitalised on in future mechanisms.

Which of these countries do you expect to become major offset providers by 2020? (N=25)



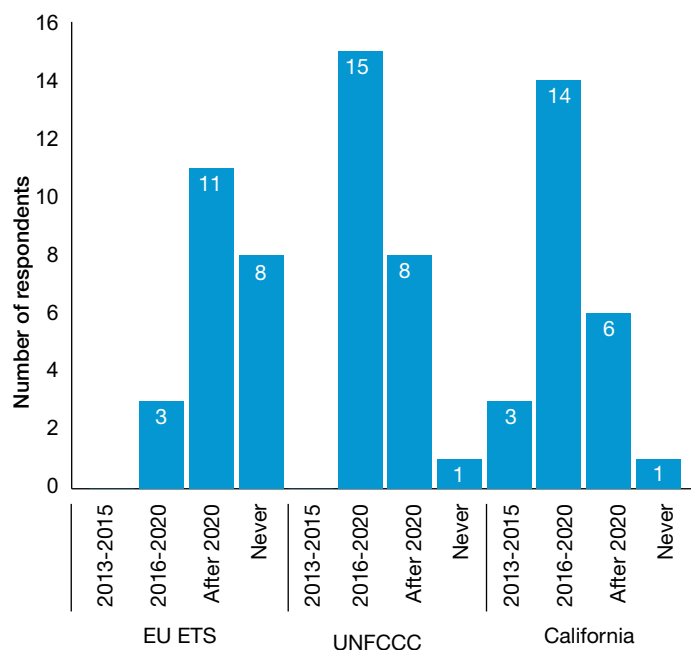
REDD+

Two-thirds of respondents are optimistic that REDD+ credits will be permitted in California before 2020 and two in three thought that they will have equivalent status to the CDM under a UNFCCC umbrella by the same date. However, in the EU ETS, most respondents expected REDD+ credits would never become eligible (one-third) or only after 2020 (two-fifths).

Respondents noted that it would become a lot easier to comment on eligibility prospects when more details are available on what a REDD+ mechanism will look like. The fact that REDD+ eligibility was a political decision was also brought up:

“The entry of REDD into the EU is more related to personalities than policy perspectives.”

When do you expect to see REDD+ credits in the following markets? (N=26)



New Market Mechanisms

Respondents were broadly divided on whether New Market Mechanisms (NMMs) would emerge before 2020, or after.

Of the four options, REDD crediting seems most likely to emerge before 2020 (two-thirds), followed by Nationally Appropriate Mitigation Action (NAMA) crediting (half). Still nearly half thought that sectoral crediting would also emerge before 2020.

Optimists were clear that such mechanisms were necessary to broaden international involvement in the markets and make substantial emissions cuts.

“We need at least one of these mechanisms by the early 2020s or the global market opportunity to tackle climate change is dead.”

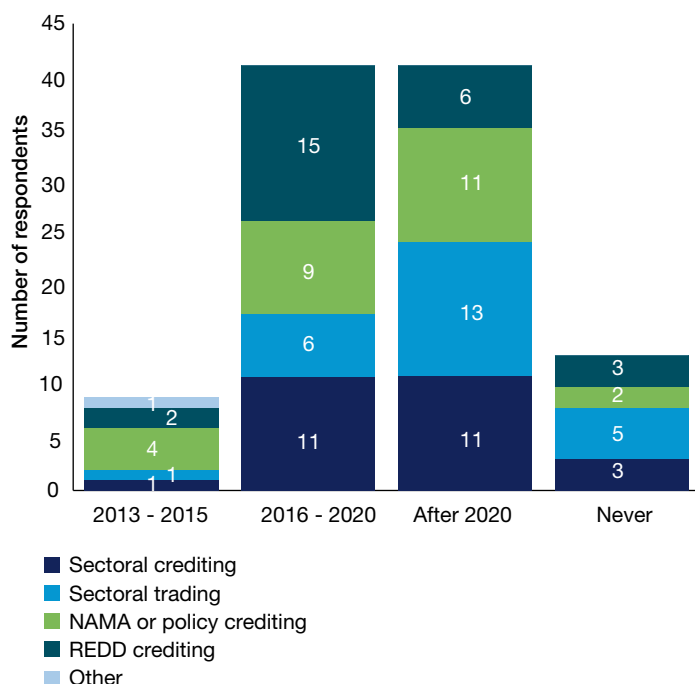
Pessimists emphasised the lack of definition surrounding these terms, and the fact that it might take years to establish how schemes will operate in an integrated international framework, that is attractive to private investors.

“Are these robust commodities for people to be investing in ... not yet. We need to be trading in CO₂, not promises.”

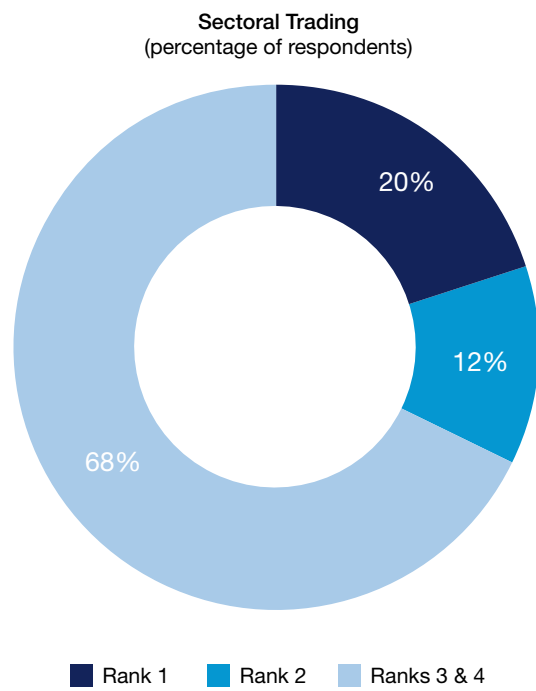
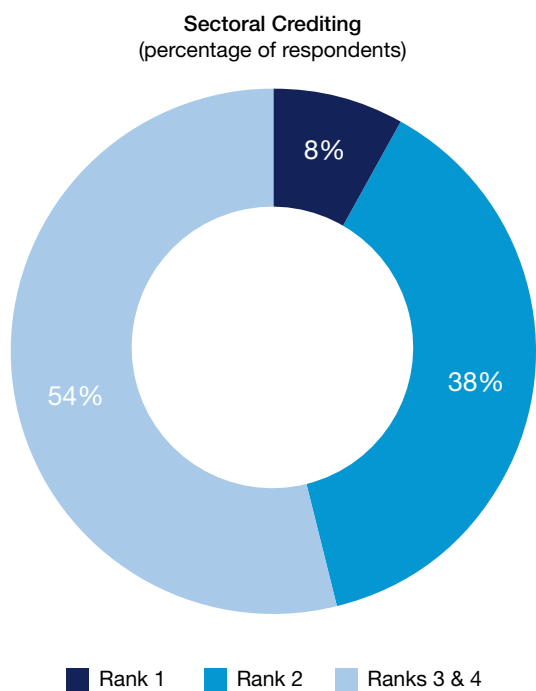
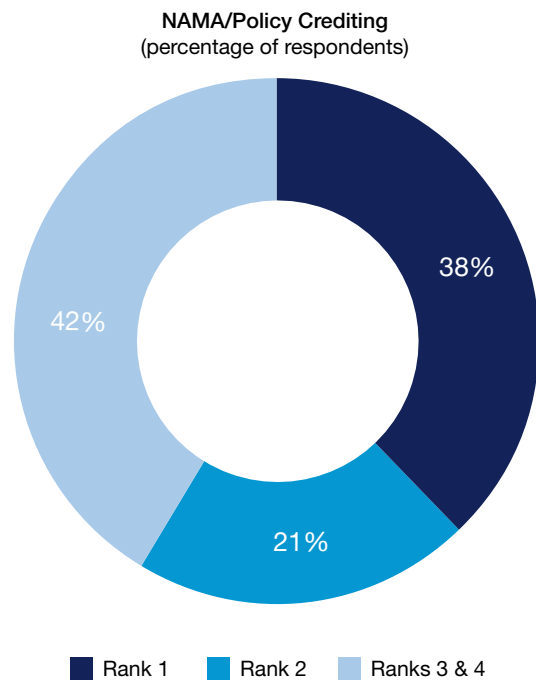
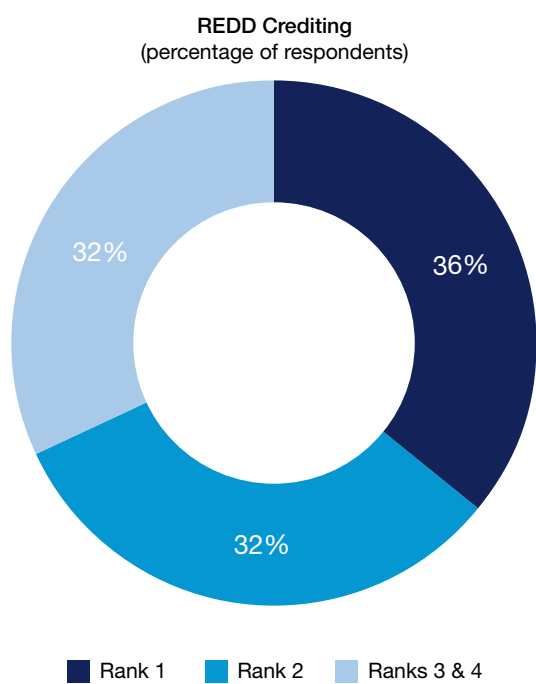
A majority thought that REDD+ (over half), NAMA (two-thirds) and sectoral crediting (over half) would be comparable in size, or larger than the CDM in 2020. Several respondents pointed out that this reflected the relative decline of the CDM as much as the rise of NMMs. One added, *“they’ll be bigger than the CDM, but won’t do as much as the CDM did in its first few years.”*

Most respondents (nearly four-fifths) thought that NMMs would not undermine the CDM. In the short-term respondents indicated that the CDM and NMMs will operate concurrently, with conflicts potentially occurring where NAMA or Sectoral crediting measures cover the same sectors as CDM projects.

When do you expect the following to emerge as new market mechanisms? (N=26)



How likely do you consider the following new market mechanisms to emerge before 2020? (N=25) (Rank 1 - most likely; Rank4 - least likely)



New markets

US and Canada

Half our survey respondents expected that US federal legislation on GHG emissions trading will come into force before 2020. Respondents often pointed out that this would hinge on party politics rather than science or even the economy. A number of respondents felt that 'demonstrable events' have the potential to drive the political process: impacts from climate change could be decisive in shaping the political landscape. Pessimists on federal legislation before 2020 (more than two-fifths) were sceptical of the ability of party politics to change before this time. Interestingly, the reasoning behind this was often aligned with the optimists' – but pessimists did not foresee sufficient climate impacts by 2020 to drive changing attitudes.

"America will act the day they have irrefutable proof that climate change is happening."

Three in four of those answering (just under two-thirds of those asked) estimated that the Californian carbon allowance price would range between \$10 and \$20 for the first three years of the scheme (i.e. 2012-2015).

On the topic of states (re-) joining the Western Climate Initiative (WCI), more than a third of respondents withheld comment. Limited interest in these markets is understandable given only California is even in the early stages of establishing a market. But it is also potentially revealing: key market players' limited interest in regional

schemes may suggest that these are less likely to be influential in European and other markets.

Those more familiar with North American markets indicated that state politics limit the possibility of any former WCI members rejoining, or setting up alternative trading schemes. It was suggested though, that if the Californian scheme discriminated against electricity imports from surrounding States, then this might provide the necessary impetus to influence state legislatures in Arizona, New Mexico and Utah.

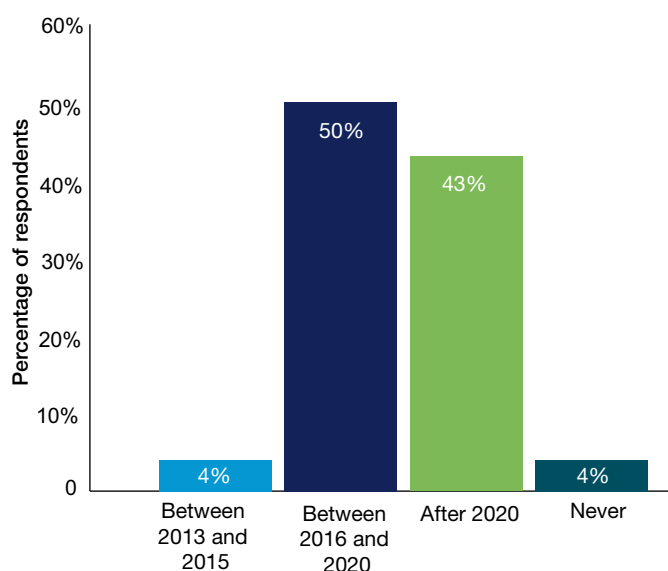
The two most frequently selected States/Provinces considered likely to be trading before 2020 were both in Canada, British Columbia and Ontario. The federal outcome in Canada was seen to be tied to that of the US.

Regardless, it was suggested that too much focus is being placed on regional schemes, diverting attention away from national prerogatives.

"A fully-functioning federal scheme - shouldn't that be the objective? Regional programmes are often just a distraction from the end goal."

Respondents more often than not believed that, if US and Canadian federal schemes were to emerge, they would represent a significant source of demand for international offsets as its abatement costs are high by global standards. However, an appreciable minority thought offsets would be limited to purchases between the two countries (and maybe Mexico).

When do you expect the US regional schemes to be pre-empted by national climate change legislation or merged into a national scheme? (N=27)



Rest of the world

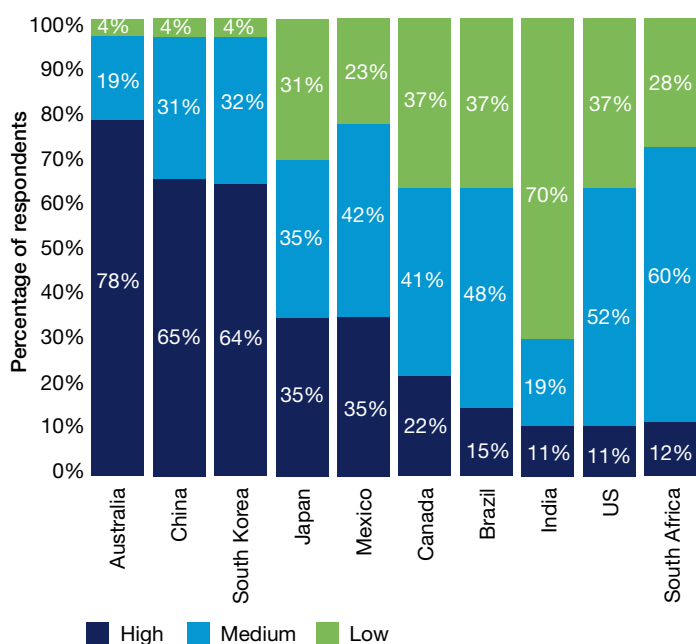
Outside North America, respondents thought that Australia (more than three in four), China (two-thirds) and South Korea (two-thirds) were very likely to emerge as viable carbon markets before 2020. This reflected recent legislation in Australia and South Korea, and the acceleration of emissions trading pilot schemes in China. Of these, China was often expected to use its own offsets in a national scheme, but the other two were expected to be significant buyers of offsets from the international market.

Respondents were pessimistic about India, with nearly three in four indicating it was unlikely that a viable carbon market would emerge before 2020. Although only one-third thought that it was very likely that a viable market would

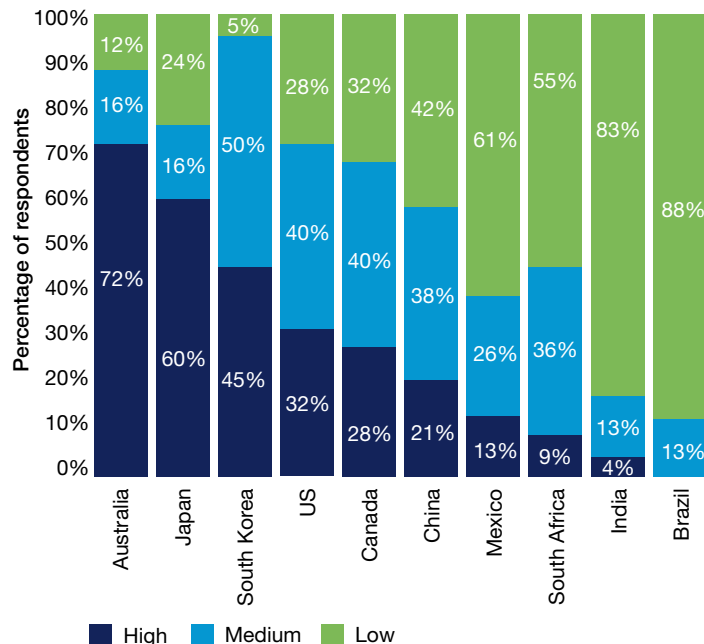
emerge in Japan before 2020, three in five thought that it would be a significant offset purchaser. Some stipulated that this might be because Japan could follow alternative paths to reducing national emissions, including the BOCM (see Section 2 – International action on climate change).

Mexico elicited mixed views, with 'high' probability responses of a market emerging before 2020 accounting for one-third, 'medium' for nearly half, and 'low' one-quarter. Optimists were responding to the recent bill passed by President Calderon enshrining in law an emissions target and trading scheme. Pessimists either predicted a policy reversal following the election in July 2012, or a gradual waning of commitment as Mexico's neighbours to the North failed to implement comparable policy.

How likely is a viable carbon market to emerge in the following countries before 2020? (N=26)



Given a market emerges, how likely is each of these markets to be a significant offset buyer from the international market? (N=24)



Many respondents saw these emerging markets linking up before 2020. Two-thirds thought that at least two were highly likely to link by 2020. Common linkages suggested include:

- California-Québec
- Australia-New Zealand
- Australia/New Zealand and EU ETS
- Japan-South Korea
- Japan/South Korea and China

How to run an emissions market

Despite the diversity among our respondents (who included traders, regulators, and compliance entities), their responses crystallised into a common set of ‘lessons learnt’ from the EU ETS. In general, they advised that regulators of new emissions trading schemes:

- Build in flexibility mechanisms to cope when reality deviates from prior assumptions (especially on economic growth). These mechanisms should be designed not to be politically manipulated. Australia’s measures (price floor/ceiling) were held up as an example here.

- Broadly follow the EU’s lead on infrastructure, administration and governance. Although early legislation was unclear, the data, Monitoring, Reporting and Verification (MRV) and trading systems were felt to be adequate for the task. Security has been shown to be crucial for market confidence.
- Run a soft pilot phase akin to Phase I in the EU ETS, allowing participants to get used to the system. Only after this, cross-phase bankability was advocated to keep costs low and predictability high.
- Gradually expand the proportion of allowances auctioned, right from the early phases, and gradually expand the sectoral coverage.
- Ensure independence between the political target-setting institutions and the administrative market oversight institutions.

One respondent suggested that “if you make the ETS the cornerstone of your GHG policy you should stick to it, and make it work”. It was added that layering additional climate policy, including renewable energy subsidies and carbon price floors, runs the risk of undermining the core carbon price signal, and simply shifts abatement round the EU at taxpayers’ expense.

Number of respondents answering that it is highly likely that the indicated markets would formally link to one another (see key).



About the survey

Conducting the survey

The survey was conducted on behalf of IETA by the PwC Sustainability and Climate Change Team in London. The interview schedule was jointly developed by IETA and PwC.

Interviewees included IETA Board Members who represent compliance entities, project developers, consultants and service providers, financial institutions, traders and investors. Non-board members interviewed, also represented segments listed above, with a large proportion from the financial sector. Further to that there were also representatives of government and government bodies.

We asked 33 individuals to be interviewed either face-to-face or over the telephone between April and May 2012. A total of twenty-seven responses were received.

This report was prepared for IETA by the PwC UK Sustainability and Climate Change team.

Survey Questions

Issues covered in the survey included:

- Extent to which the outcome of Durban, COP17 is positive for the carbon markets?
- What impact on investment levels in the CDM / carbon reduction projects do the proposed CDM EB reforms, the inclusion of CCS, eligibility restrictions in the EU, and the emergence of new markets have?
- When are REDD+ credits expected to be seen in the EU, UNFCCC and Californian markets?
- Gauging the significance of various factors in impacting investment levels in carbon reduction projects (current economic climate, expected growth in compliance coverage, limits to the use of offsets, politics of action on climate, state of the UNFCCC negotiation process, national policies and incentives).
- To what extent fraud has had a long term impact on emissions trading?
- Expectations of the level of ambition (2 or 3 degrees) and legal form of commitments (legally binding or voluntary) to be made in 2015 under the UNFCCC.
- The likelihood of carbon markets and carbon taxation being able to raise the level of finance the Green Climate Fund (USD30 bn p.a. by 2020)
- Viability and significance of emerging new markets as major offset purchasers and providers by 2020.
- Which states might be included in future expansions of the Western Climate Initiative before 2020?
- Viability, time of development, scale and coexistence potential (c.f. to CDM) of new market mechanisms (sectoral trading; sectoral trading, NAMA or policy crediting; REDD crediting).
- Next developments in the EU ETS with regard to regulating emissions from aviation and shipping.
- When do you expect the US regional schemes to be pre-empted by national climate change legislation or merged into a national scheme?
- What volume and price trends for EUAs and CERs are expected in Phase 3 of the EU ETS? And whether the EU governments should intervene to support the market?
- Which emissions trading schemes may be formally linked before 2020?

Data analysis

In a number of questions, multiple answers were permitted. In the analysis, graphs produced reflect the total number of answers given; the text, however, generally reflects the proportional number of individuals who gave a particular answer. This will account for the instances of a few discrepancies between the text and graphics.

Glossary

CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CO₂e	Carbon dioxide equivalents
COP	Conference of the Parties
EC	European Commission
ETS	Emissions Trading Scheme
EU ETS	European Union Emissions Trading Scheme
EUA	European Union Allowance
GHG	Greenhouse gas
IETA	International Emissions Trading Association
JI	Joint Implementation
LDC	Least Developed Country
MRV	Monitoring, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Action
NMM	New Market Mechanism
PwC	PricewaterhouseCoopers
REDD+	Reducing Emissions from Deforestation and forest Degradation (Plus Reforestation)
sCER	secondary CER
UNFCCC	United Nations Framework Convention on Climate Change
WCI	Western Climate Initiative

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About the International Emissions Trading Association

Members

The International Emissions Trading Association (IETA) is a non-profit business organization created in June 1999 to establish an effective international framework for trading in greenhouse gas emission reductions.

Our membership includes leading international companies from across the carbon trading cycle. IETA members seek to develop an emissions trading regime that results in real and verifiable greenhouse gas emission reductions, balancing economic efficiency with environmental integrity and social equity.

IETA currently comprises more than 155 international companies from OECD and non-OECD countries who operate in working groups following the major current issues in trading and climate policy.

Vision

IETA is dedicated to ensuring that the objectives of the United Nations Framework Convention on Climate Change and ultimately climate protection are met through the establishment of effective systems for trading in greenhouse gas emissions by businesses, in an economically efficient manner while maintaining societal equity and environmental integrity.

IETA will work for the development of an active, global greenhouse gas market involving all three flexibility mechanisms of the Kyoto Protocol: the Clean Development Mechanism (CDM), Joint Implementation (JI) and Emissions Trading, as well as those outside the Kyoto Protocol.

Further information is available at www.ieta.org