

Shifting the carbon pricing debate

Emerging business attitudes
fuel momentum for global
climate action

The EY logo consists of the letters 'EY' in a bold, white, sans-serif font. A yellow triangle is positioned above the 'Y', pointing downwards towards the letter.

Building a better
working world

Welcome from EY

Conversations about the role of business in finding solutions to climate change have increased in both their sophistication and specificity in recent years. A growing number of businesses are now actively investing in low-carbon initiatives and technologies. Such moves are proving to be of benefit - not only to the environment, but to a business's bottom line.

In the context of this year's COP21 gathering in Paris, low-carbon discussions are gaining momentum. Since agreements in Kyoto and Durban, and in anticipation of Paris, the paths to a large-scale reduction in greenhouse gas emissions from businesses are becoming global considerations. As those discussions widen, the interest in harmonized, reliable and transparent methods for carbon pricing is likely to intensify.

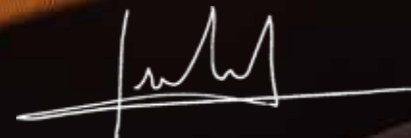
In an effort to better understand the drivers for business, and in the context of EY's participation in the World Bank's Carbon Pricing Leadership Coalition, we commissioned this survey to take a pulse on the issue and practice of carbon pricing. For some time, the thinking was that any carbon pricing protocol would require outside direction for businesses to act. The deployment of carbon pricing mechanisms has met resistance due to concerns regarding their potential effect on business competitiveness.

Now, our survey findings - along with growing business support for a number of key initiatives driven by the likes of the United Nations (Business Leadership Criteria), the World Bank and the World Business Council for Sustainable Development (WBCSD) - provide evidence that companies are increasingly open to taking independent carbon pricing action, fully expecting it will actually improve overall performance.

Such action will be complicated - and our survey suggests uneven - but it will bring a wealth of opportunity from which proactive businesses may benefit. Companies that intend to lead are already incorporating future expected carbon prices required for innovative and expensive technology into their decision-making. Businesses, generally, need to understand these market-driven solutions. Advancements, such as those expected from COP21, will only serve to further motivate the private sector.

We appreciate the participation of the executives in our survey, and we hope this discussion helps spotlight how the adoption of carbon pricing by business may be driving global climate action.

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Introduction

Surrounding this year's 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), increasing numbers of multinational businesses and global institutions have come out in support of carbon pricing. This report, commissioned by EY's Climate Change and Sustainability Services practice, highlights the findings from a survey exploring the prevailing views of businesses around the world toward carbon pricing, as both a regulatory necessity and strategic corporate priority. It finds not only that carbon pricing is welcomed by the majority of respondents as the best way to cut carbon emissions, but that it is also expected to bring benefits to companies in a number of areas.

On 1 June 2015, six major oil companies wrote an open letter saying that they would be able to take faster action on climate change if there was a stronger - eventually global - carbon pricing framework in place.¹

This is a sharp change from a decade ago, when energy sector companies were more commonly raising doubts about the urgency of climate change rather than actively supporting strategies to reduce carbon emissions. What's driven this? "There is a growing likelihood that we will see some price on carbon established," explains Mathew Nelson, Deputy Global Leader of EY's Climate Change and Sustainability Services practice. "The conversation is gradually changing from 'if and when' carbon pricing will happen to 'how' it will happen."

More than 430 companies around the world have already set internal prices for their carbon emissions. In 2014, the number of companies setting an internal price for carbon stood at just 150. Another 583 companies say they will adopt carbon pricing in the next two years.²

"Carbon pricing is widely accepted today as one of the most effective tools to reduce greenhouse gas emissions," says Lila Karbassi, Head of Environment and Climate at the UN Global Compact. "We see a lot of signals from businesses across regions and sectors that using a price on carbon is an effective means to reducing emissions. Through our Business Leadership Criteria on Carbon Pricing,³ nearly 60 companies have committed to setting, advocating and reporting a meaningful price on carbon." This is confirmed by the respondents to our survey, 54% of whom believe carbon pricing is the most effective way to cut carbon emissions.

Although carbon-pricing frameworks such as the European Emissions Trading System (EU ETS) and national carbon taxes are already a fact of life for some companies, a growing number are taking voluntary steps to implement an internal price for carbon in anticipation of such regulations in their operating markets.

In time for the COP21 meeting in December 2015, EY conducted this new study, surveying more than 100 executives from around the world that have an impact on their company strategies. The following are the key findings that highlight their attitudes to carbon pricing.

“We see a lot of signals from businesses across regions and sectors that using a price on carbon is an effective means to reducing emissions.”

¹ 'Six Oil Majors Say: We Will Act Faster with Stronger Carbon Pricing,' UNFCCC, June 1, 2015 <http://newsroom.unfccc.int/unfccc-newsroom/major-oil-companies-letter-to-un/>.

² 'Threefold surge in companies disclosing carbon price shows climate change concerns going mainstream,' CDP, September 21, 2015 <https://www.cdp.net/en-US/News/CDP%20News%20Article%20Pages/surge-in-companies-disclosing-carbon-price.aspx>.

³ See the Caring for Climate Business Leadership Criteria on Carbon Pricing: <http://caringforclimate.org/workstreams/carbon-pricing/>.



Prevailing business attitudes toward carbon pricing

Carbon pricing – a growing business consensus

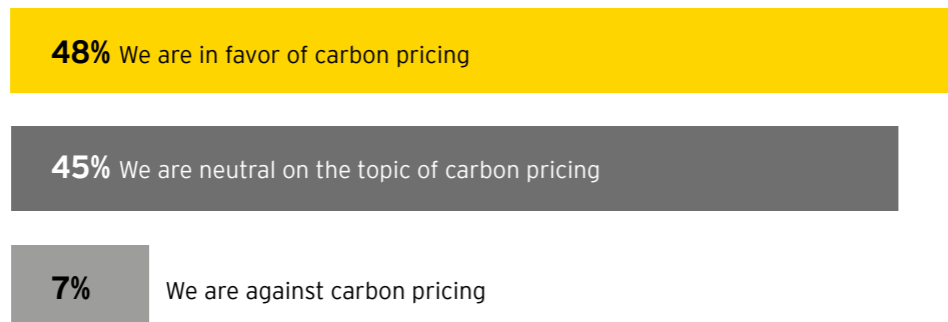
Our survey found that more than half of respondents (54%) believe that carbon pricing is the most effective way to cut carbon emissions. Nearly half (48%) say their company is in favor of carbon pricing, with only 7% of companies opposing (see Figure 1). While in Europe and emerging markets, the majority of companies in our survey consider themselves to be in favor of carbon pricing (at 64% and 59% respectively), in the US, companies were much more likely to be neutral on the topic, with only 18% overtly in favor of carbon pricing (see Figure 2).

Support for the concept of carbon pricing is on the rise. The World Bank Group reports that 39 nations and 23 cities, states or regions are using a carbon price. "This represents the equivalent of about seven billion tonnes of CO₂, or 12% of annual global GHG emissions," says James Close, Director of the World Bank Climate Change Group. "This is a threefold increase over the past decade."

Consensus seems to be building behind the idea of a price on carbon. Our survey found that 73% of respondents based in countries where carbon pricing mechanisms have not yet been implemented believe that they will be put in place in the next five years. However, there is clear demand for the improvement of carbon pricing schemes as they exist today. Nearly two thirds (63%) of respondents believe that current approaches to carbon pricing need to be rethought. "How can companies compare and quantify energy efficiency standards in India with an emissions trading scheme in China, for example?" asks Karbassi. "What we've heard from some companies from our research is that until there's more clarity on comparable standards for carbon globally, it's difficult for certain industries to make a fast move in this area."

Karbassi believes there are three key factors holding back companies from adopting carbon pricing today. "From recent consultations with companies, the most commonly cited challenges with carbon pricing were the lack of clarity and long-term certainty in climate policies, lack of a common method to set a carbon price, and the difficulty of arriving at the right price including competitiveness issues," she explains. "At the same time, these companies also see many benefits such as increased support across business units for renewable investments."

Figure 1. Which of the following statements best describes your company's position on the introduction of carbon pricing in the country where you're personally based?

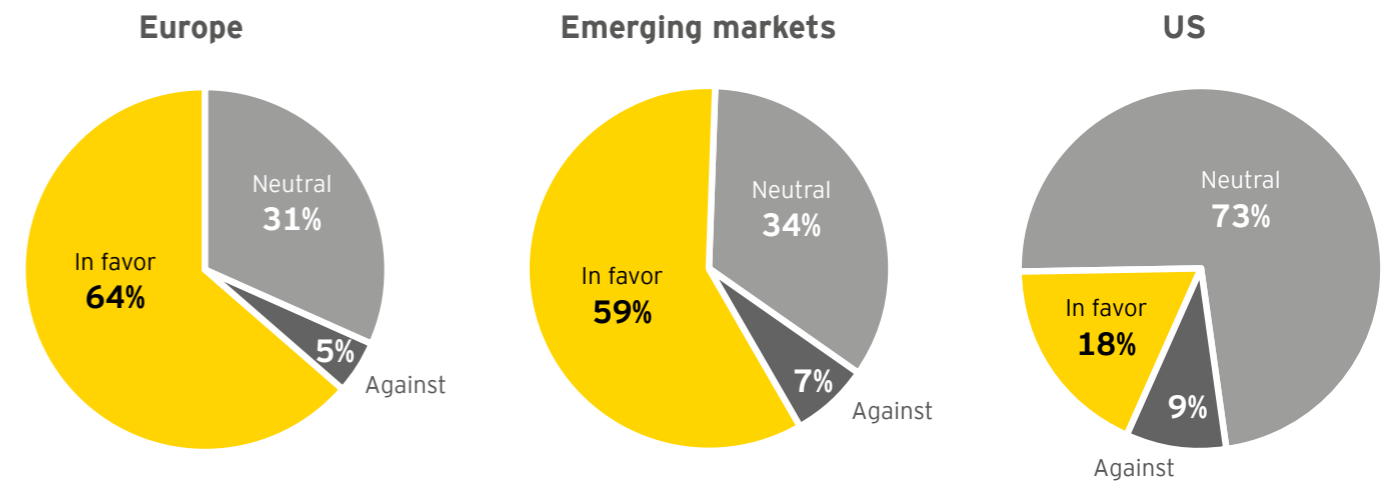


Despite the variables, our survey found support for carbon pricing across many locations, including emerging economies, where 59% of companies in our survey are in favor of carbon pricing (see Figure 2), and in various sectors, including construction and real estate, financial services and consumer goods – areas that have not traditionally been impacted by carbon pricing policies.

"Carbon pricing schemes start nationally," says Jean-Pierre Clamadiou, CEO of Solvay. "They have to be connected internationally to scale up our climate ambition. We have been advocating the positive impact these mechanisms will have for furthering the global mobilization of business in the fight against climate change."

Changing attitudes from businesses globally, and in particular in emerging markets, are providing new impetus to policy discussions on the setting up of carbon pricing schemes. In order to be prepared for regulatory requirements related to a carbon market mechanism, companies are increasingly developing monitoring and verification approaches and identifying mitigation actions.

Figure 2. Which of the following statements best describes your company's position on the introduction of carbon pricing in the country where you're personally based?



“In order to be prepared for regulatory requirements related to a carbon market mechanism, companies are increasingly developing monitoring and verification approaches and identifying mitigation actions.”



Prevailing business attitudes toward carbon pricing

The net benefits of carbon pricing

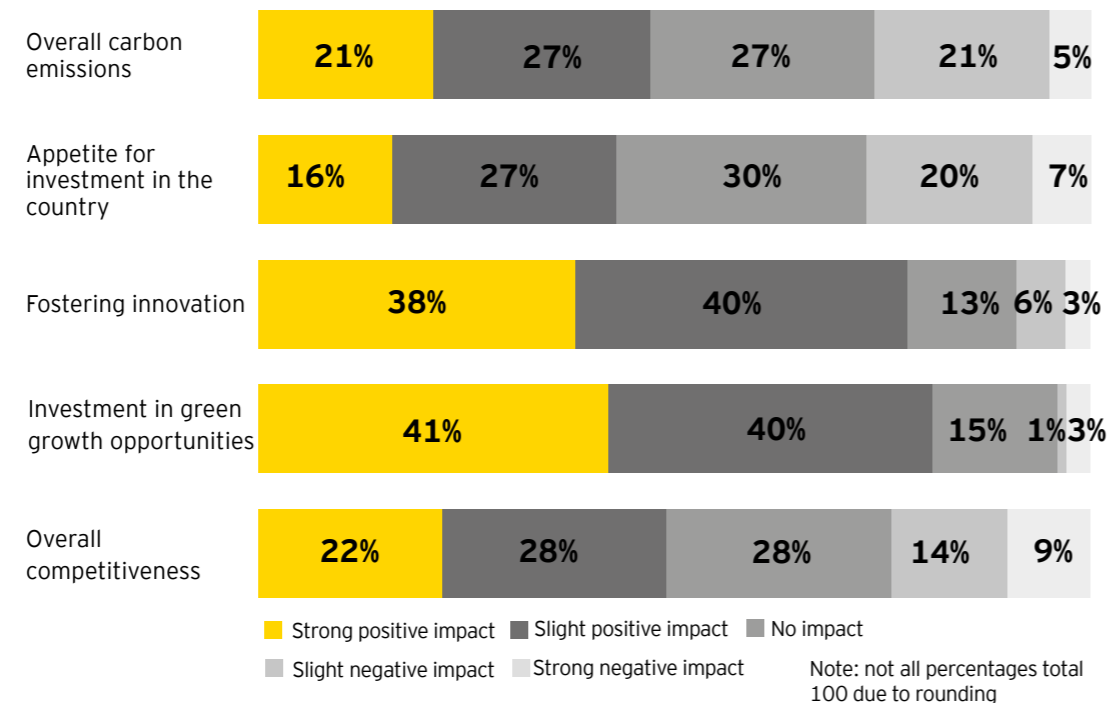
When asked about the impact carbon pricing would have on a range of areas across their businesses, respondents answered that in every case it was more likely to be positive than negative. Seventy-eight percent of respondents said carbon pricing would have a strong positive impact on fostering innovation, suggesting that carbon pricing can trigger initiatives beneficial to performance, not just compliance. Eighty-one percent of respondents said it would have a positive impact on their companies' green growth opportunities. Furthermore, almost half of respondents (49%) believe that carbon pricing would have a positive impact on their overall competitiveness (see figure 3).

One reason for optimism may be the positive reports emerging from companies that have implemented a business-wide carbon price. Pharmaceutical company GSK, for example, reports substantial benefits from being part of the EU ETS, including the sell-off of unneeded European carbon allowances and savings from switching to energy-saving policies.⁴ Microsoft, having voluntarily set an internal price for carbon, reports that it saves US\$10m per year as a direct result of that action.⁵

Over the longer term, other benefits may emerge, not least that it may be more cost effective for companies to act sooner rather than later on carbon pricing. "We know that acting now is cheaper than waiting until tomorrow," explains Gérard Mestrallet, CEO of Engie.

One reason for optimism may be the positive reports emerging from companies that have implemented a business-wide carbon price.

Figure 3. What impact would carbon pricing regulation have on your company?



This year's COP21 gathering in Paris will include a focus on carbon markets and carbon pricing practices.

Market practices with the potential to reduce carbon emissions are being watched closely by business leaders today.

⁴ '10 years of carbon pricing in Europe,' CISL, p7, 2015 <http://www.corporateleadersgroup.com/resources/publications/10-years-of-carbon-pricing-in-europe-2013-a-business-perspective>.
⁵ 'Making an impact with Microsoft's carbon fee,' Microsoft, March 2015 <http://download.microsoft.com/download/0/A/B/0AB2FDD7-BDD9-4E23-AF6B-9417A8691CF5/Microsoft%20Carbon%20Fee%20Impact.pdf>.



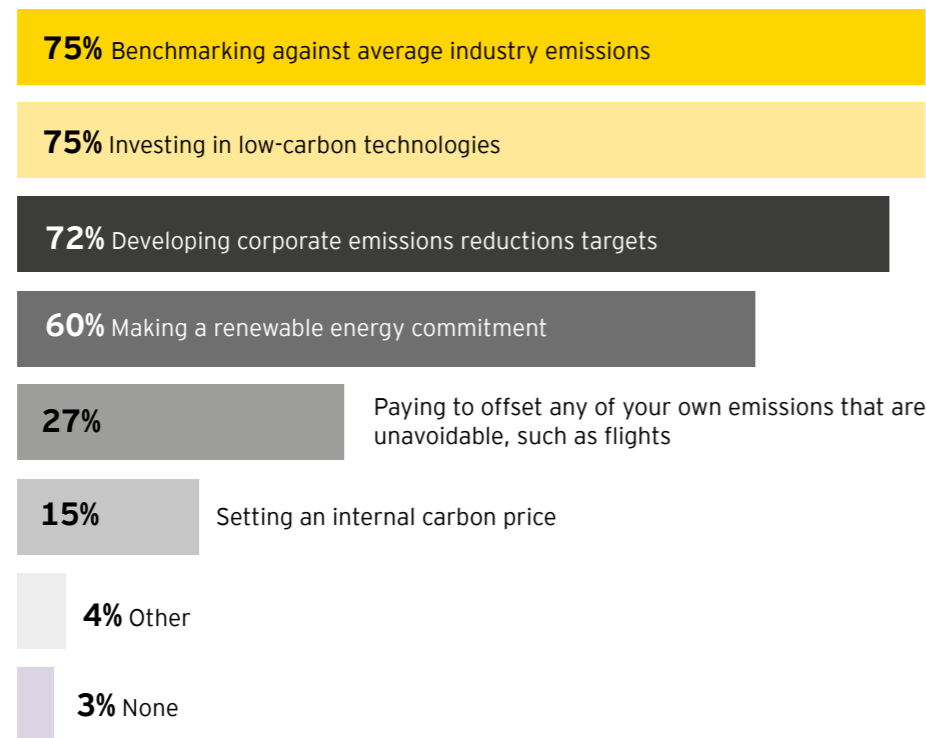
Prevailing business attitudes toward carbon pricing

Internal carbon pricing - part of a broader move to decarbonization

Emissions reduction by big business is growing more common. Three-quarters of survey respondents already benchmark their carbon emissions against industry averages. Beyond target setting and improved measurement, some companies are also investing in low-carbon assets and turning to renewable energy sources. Three-quarters of respondents also say their company is investing in low-carbon technologies, and 60% have made a renewable energy commitment of some kind (see figure 4). This is more common among large companies (those of over US\$10b in revenues). Nine in 10 of this group say they are investing in low-carbon technologies, and more than three-quarters (76%) say they have made a renewable energy commitment.

This marks a shift from prevailing attitudes just a few years ago and echoes recent developments in the US. In October 2015, the White House announced that 68 companies had joined the original 13 signatories of the "American Business Act on Climate Pledge," forming a group with an estimated market capitalization of US\$5t.⁶ Each has made various commitments to reduce their

Figure 4. Which actions has your company taken as part of its carbon emission reduction strategy?

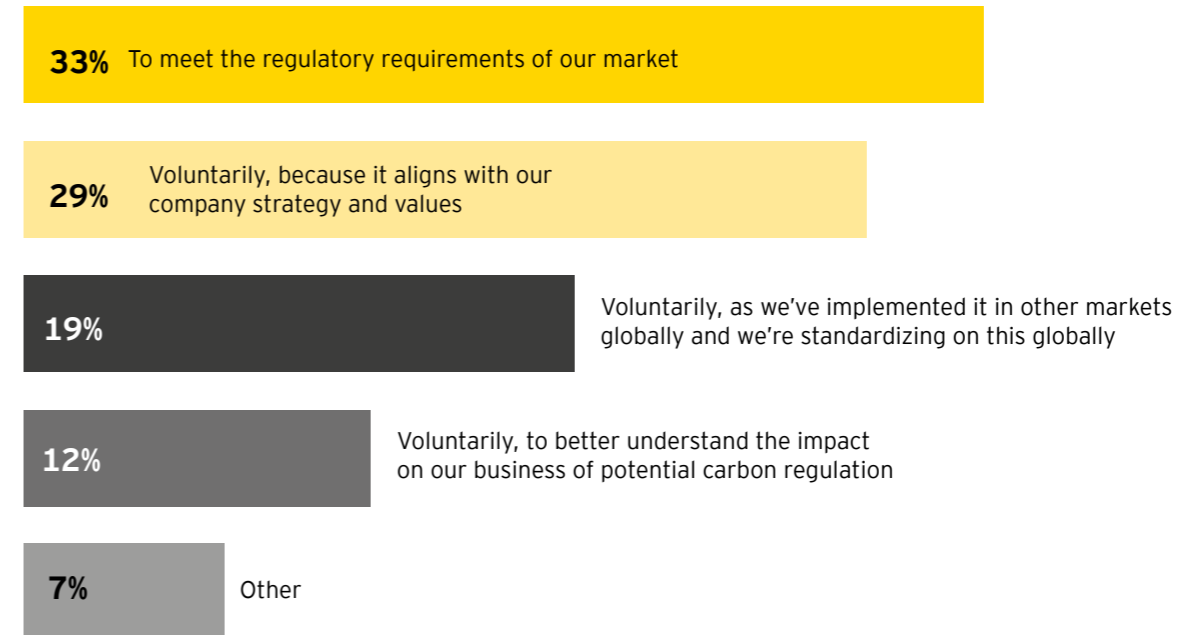


carbon footprint, with some committing to implementing internal carbon pricing strategies. The White House reportedly hopes to add a third round of companies to the group around the time of COP21.

Indeed, there are a number of reasons these companies might consider implementing such a policy. Of the respondents to our survey who have implemented a carbon pricing strategy, 33% say it is primarily to meet regulatory requirements, 29% say it is done voluntarily to align with the company's strategy and values, 19% say it is part of a global standardization effort and 12% say it is to better understand the impact of future carbon regulation (see Figure 5).

The companies that are implementing carbon-pricing strategies are doing so "because they're convinced that this will be a reality sooner or later, and prefer to anticipate regulatory changes," says Alexis Gazzo, Partner in EY's Climate Change and Sustainability Services practice.

Figure 5. What was the primary motivation to implement a carbon pricing strategy in the country where you are based?



⁶ 'Global companies sign White House pledge on climate change action', FT, October 19, 2015 <http://www.ft.com/cms/s/0/ed2c2682-763a-11e5-933d-efcdc3c11c89.html#axzz3pfAOieWd>.



Prevailing business attitudes toward carbon pricing

The potential for regional carbon markets

The World Bank's Partnership for Market Readiness program is designed to help new countries achieve emissions reduction through instruments such as carbon pricing, and encourages the development of regional carbon markets. The fact that some of the world's largest economies have already implemented emissions trading systems could be significant in shifting perceptions toward carbon pricing.

The EU ETS has been active since 2005, and is now in its third phase. China plans to implement a national system by 2017, having conducted a seven-province pilot program. A price on carbon in British Columbia, introduced in 2008, is lauded as one of most successful carbon pricing schemes to date – by 2012, emissions had dropped 6% below 2007 levels.

What will key players like China be able to learn from 10 years of cap and trade in Europe? "At the end of each allocation phase of the EU ETS, there was some uncertainty over how the next phase would be managed," explains Alexis Gazzo. "There were also a number of questions in the initial phases about how allocations would be managed between sectors, industries and companies. The EU ETS has been a pioneering scheme that has helped develop experience in how these markets function, and which risks to anticipate."

Both China and South Korea have worked closely with EU regulators to understand best practices.

"Governments are becoming more adept at designing and running effective carbon pricing systems," says James Close of the World Bank. "This is evident in the new FASTER Principles for Successful Carbon Pricing report issued in September by the World Bank Group and the OECD. These principles capture the dynamic learning that we have seen over the past decade, and show that governments are building from one another's success to develop a common set of elements that address key challenges such as concerns about emissions leakage, impact on the poor and productive use of revenues."

China will not have to deal with the complexities of negotiating with multiple governments, as the EU did when setting up its ETS in 2005, and there are growing expectations that it can become a key player in a regional, or even global, carbon market.

However, before China can become a pivot for a global market, EY's Nelson believes a few questions need to be answered. "China will have a scheme in place. The question is: what kind of market will it be? Will it be a liquid market and will it be a meaningful market? As is true for any region, the levers that are pulled and how hard they are pulled can make a huge difference to the market, and the way the market operates."

Perhaps further aiding efforts for an effective national system in China, the COP21 discussions in Paris seem likely to bring greater clarity to questions of process, targets and effectiveness.

Optimism is rising for a global COP solution

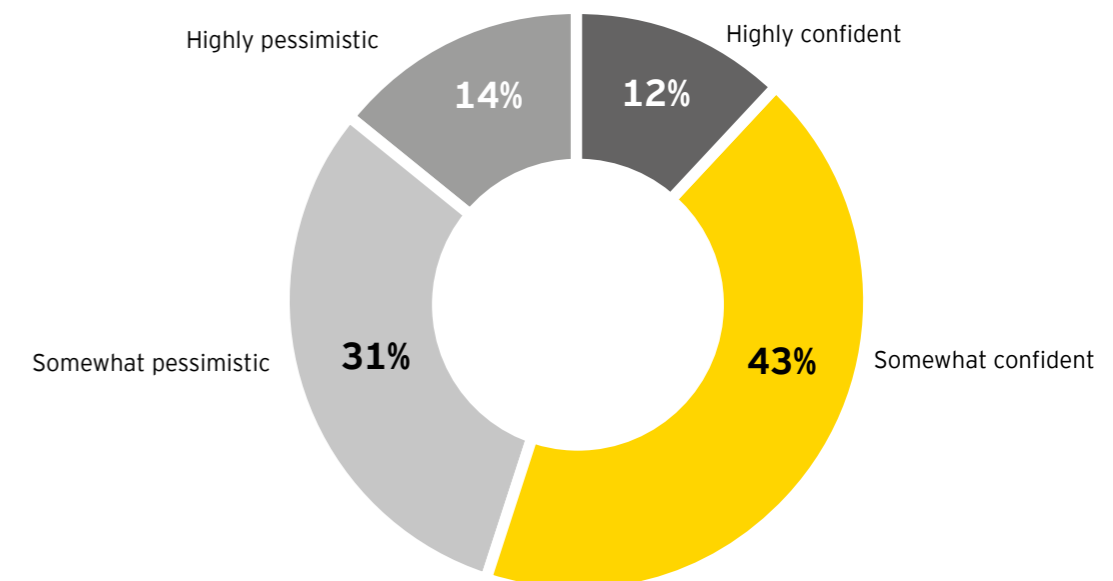
Among the executives polled for this study, more are confident than pessimistic about COP21 leading to a fair and reliable carbon pricing system. Overall, 55% of respondents are confident, versus 45% that are pessimistic (see Figure 6). The most frequently pessimistic responses in our survey were from US-based participants, where 67% of respondents express pessimism that negotiations at COP21 can lead to a fair and reliable system.

Global optimism may have been fueled by the general build-up to COP21, as well as the fact that companies were included in pre-meeting discussions – a dramatic change from the past when COP focused purely on inputs from governments and NGOs.

However, 68% of respondents believe it will be primarily up to national governments to lead the fight on climate change. Given the lack of concrete outcomes from previous COP meetings, this is a pragmatic response from our survey respondents. "A communiqué that says we are going to agree to a two-degree world just won't cut it in terms of giving the global investment community the certainty it needs," says EY's Nelson, referring to the often cited maximum target of a +2 degree Celsius change in average global temperature. Countries attending COP this year must submit intended nationally determined contributions (INDCs), which has the potential to drive a bottom-up solution to climate change, and encourage countries to take broader actions to reduce their emissions.

"My greatest hope for COP21 is that it will send the signals the major markets need in order to implement policies that will achieve emissions reduction targets," he says. "That might seem somewhat modest, but if we have the US and China setting ambitious targets for emissions reductions, it will send a significant message to the global investment community."

Figure 6. How confident are you that the COP negotiations can lead to a fair and reliable carbon pricing system?



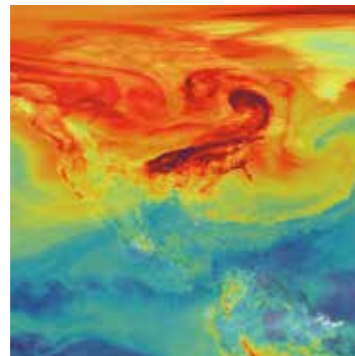


Sustaining momentum beyond COP21: Consensus into action

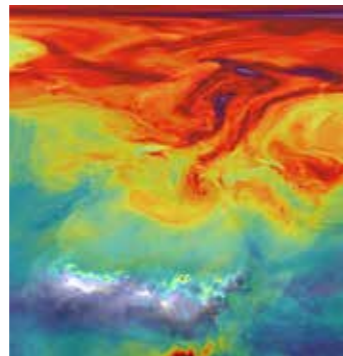
Although carbon pricing isn't on the COP21 agenda as a stand-alone item, "The INDC implementation offers an excellent opportunity for countries to roll up their sleeves and learn from others as they use carbon pricing as a cornerstone of a national climate mitigation strategy," believes James Close of the World Bank.

This could have implications for the rate at which businesses adopt carbon pricing strategies, particularly in countries where there is no formal structure for putting a price on carbon emissions. There are other barriers to implementation also. "Undoubtedly, carbon markets will be a controversial and tough topic in the COP negotiation, as they could affect, among other things, international trade agreements, some of which have only recently been reached," says José Manuel Entrecanales Domecq, Chairman and CEO of Acciona. "However, strong signs encouraging carbon pricing are a must as one of the main COP21 conclusions."

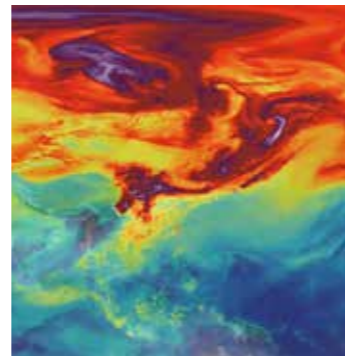
Our survey shows businesses around the world taking action on carbon pricing, and opening up to the benefits it can bring in terms of competitiveness. The next challenge will be maintaining the momentum that has been seen in the run-up to COP21 through 2016 and beyond.



As discussions at COP21 in Paris and elsewhere widen, the interest in harmonized, reliable and transparent methods for carbon pricing is likely to intensify.



Seventy-eight percent of businesses surveyed believe carbon pricing can foster innovation and trigger initiatives beneficial to performance.



Seventy-three percent of respondents in countries without carbon pricing mechanisms believe such mechanisms will be in place in the next five years.

“My greatest hope for COP21 is that it will send the signals the major markets need in order to implement policies that will achieve emissions reduction targets...if we have the US and China setting ambitious targets for emissions reductions, it will send a significant message to the global investment community.”

Lessons for business: shifting from analysis to readiness

More than 80% of businesses questioned expect to be impacted by new carbon pricing regulations in the next five years. For these companies, the ability to identify risks and opportunities of new carbon market policies and stay ahead of expected change is critical. EY identifies several steps that can be implemented to adapt to this changing environment:

1. Embed carbon risk and opportunity assessment in corporate strategy

Building a comprehensive climate change strategy is necessary to ensure that climate-related risks and opportunities are taken into account. Implementing a corporate-wide carbon approach is key to reducing the exposure to climate risk, by reconsidering existing investments, prioritizing emission reduction actions, and screening opportunities for greater energy efficiency and innovative low-carbon technologies.

2. Establish a carbon reporting process

Setting up a monitoring, reporting and verification (MRV) framework across the value chain enables companies to identify baseline carbon emissions and to monitor performance over time. Developing internal reporting processes before regulatory requirements are established has proved beneficial to companies that were ahead of the market, for instance in adapting to cap-and-trade schemes.

3. Commit to reduction targets

Once monitoring and assessment processes are in place, set targets for the reduction of carbon emissions across the business. In addition, companies may seek to purchase cleaner sources of power, such as renewable energy.

4. Communicate on results and progress

Report on business progress against targets and seek verification of performance. Communicating achievements internally and externally will provide company stakeholders with the knowledge that risks and opportunities are being appropriately managed.

5. Set an internal carbon price

Several companies have already implemented an internal carbon price in strategic planning and project finance to help guide decision-making on carbon-intensive projects such as power plants. This can be useful to anticipate the carbon cost risk and reflects the impact of expected policy developments, for instance by anticipating an emissions trading scheme.

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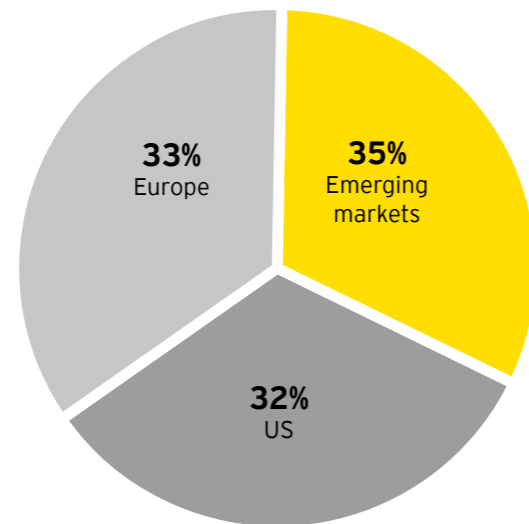


Appendix

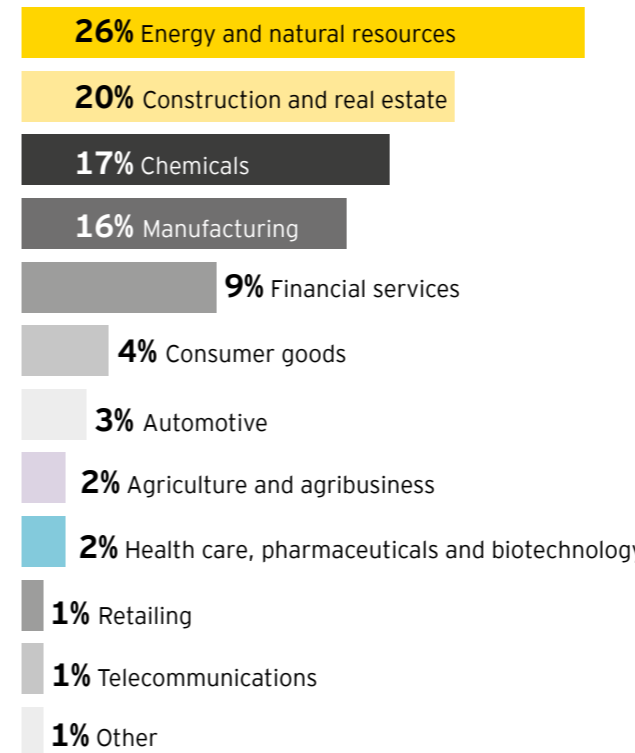
Survey demographics

Total respondents: **116**

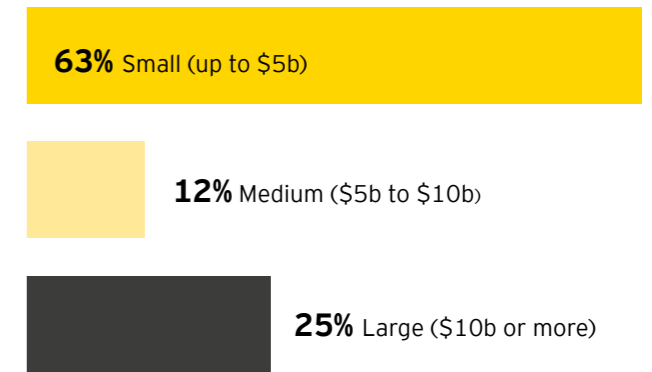
Survey respondents by region



What is the primary industry for your company?



What is your company's annual revenue in USD?



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Governments and organizations around the world are increasingly focusing on the environmental, social and economic impacts of climate change and the drive for sustainability. Businesses may face new regulatory requirements and rising stakeholder concerns. There may be opportunities for cost reduction and revenue generation. Embedding a sustainable approach into core business activities could be a complex transformation to create long-term shareholder value. The industries and countries in which businesses choose to operate, along with extended business relationships may introduce specific challenges, responsibilities and opportunities. Our global, multidisciplinary team combines our experience in assurance, tax, transactions and advisory services with climate change and sustainability knowledge in all industries. We provide tailored services supported by global methodologies to address specific business issues. Wherever a business may be in the world, EY can provide the right professionals to support that organization's particular sustainability goals.

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