Questions and Answers





During our recent webinar series "COP21 and the Paris Agreement: What does it mean for business?" a number of questions were posed to the presenters. We have collated all the questions submitted, and provided a brief reply in the interests of knowledge sharing.

Should you wish to discuss any of these topics in greater detail, then please contact one of our team – their details are at the end of this document.

Question 1: Managing our supply chain is a big issue, how should we go about understanding how all of this impacts our business and supply chain?

A: ERM believes that the Paris Agreement has important implications for the whole supply chain. Firms will come under increasing pressure to reduce their carbon footprints, including a focus on the carbon-intensity of their suppliers, the 'embedded carbon' in goods/materials they purchase and the carbon intensity/embedded carbon in what they sell on to customers.

The NDC (Nationally Determined Contributions i.e. the Country based plans) of every country focuses in one way or another on carbon intensity. It is anticipated stakeholders will press companies to be more carbonefficient. Under the axiom that 'you cannot manage what you do not measure', companies will need to know the carbon intensity of their suppliers and - in turn - of the

goods they supply to customers, and will likely be benchmarked against competitors in this regard.

Product lifecycle assessment is a useful tool that ERM uses to 'map' a company's direct impacts and its supply chain impacts. Using this approach, the most carbon intensive 'hotspots' can then be prioritized for mitigation actions to improve the overall carbon intensity of the product or service.

Question 2: What new measures are the major countries already taking post-COP21?

All countries are now in the process of setting out the policies, laws and regulations needed to achieve the commitments in their NDCs. Since the first 'stock take' under the Paris Agreement will happen in 2018, countries will have to submit to the UNFCCC (the United Nations Framework Convention for Climate Change) by the end of 2017 the actions they have taken to implement their NDCs – and, in order to show progress under their NDCs by the end of next year, actions will clearly have to be taken soon.

Question 3: The reduction target of 30% seems pretty aggressive - your thoughts on achieving this?

A: ERM assumes that this question refers to the 30% reduction commitment taken by the European Union and its member states for 2030. The first implication for business in the EU is the statement by the European Commission that more action will be needed to achieve this commitment beyond the existing measures already enacted. Second, because the EU also committed to act to limit warming to 2°C, they will also consider enhancing their commitment to be a 40% reduction by 2030 if they see other major economies acting adequately to achieve their NDC commitments. In short, industry in Europe will almost definitely have to do more to cut emissions.



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Question 4: How can we define the proper carbon price for business in a developing country?

A: The Paris Agreement creates a potential framework for a global price on carbon, but it could be a long time before a single price for the cost of carbon emerges globally. For developing countries, the first key thing to mention is that all nations under the Paris Agreement have NDCs with commitments to reduce emissions, although developing countries are allowed certain aspects of transition compared to industrialized nations.

The carbon costs business will face in a developing country starts with the cost of meeting measures under that country's NDC. The carbon risk to a company operating in the developing world will likely be more than complying with NDCs; carbon risk will also involve the pressure on their operations from stakeholders, investors, and competitors to reduce carbon intensity compared to peers.

Question 5: The capacity of MSMEs (micro, small and medium enterprises) to realize their potential role in the climate action is restricted by a lack of access to climate finance. What could be the role of the MSMEs (what can they do to tap into these opportunities / resources) given the outcome of COP 21?

A: One would expect that the commercial investment community will move more in the direction of rewarding carbon efficient/climate friendly firms and products, while consumers and suppliers become more carbon conscious. As for funding that falls specifically under the climate finance flows referenced in the Paris Agreement, there is supposed to be a major emphasis on MSMEs and a 'project pipeline' that is broader and deeper than typical large projects.

From ERM's experience, since the Green Climate Fund (GCF) and parallel climate finance initiatives are still in their early days, the international finance community is still working out how to leverage all opportunities. ERM is seeing interest from project proponents, different types of investors and host countries – all keen to advance investment in this area.

Question 6: How do the NDCs translate to an individual company or business unit?

A: Since each nation's NDC is unique, the way that the policies and measures under each NDC affect business will be country-specific. This will necessarily create a patchwork of different approaches between countries. Most countries are likely to look at the contributions to emission reductions that they deem to be fair for each sector under their national circumstances, taking into account international competition.

Companies will be required to report their GHG emissions according to national requirements – and this should be transparent and comparable to facilitate international review of progress. The level of effort required from each sector of economic activity and their emission reductions will be reflected in national GHG inventories.

Question 7: How does the low oil price impact the deployment of renewable energy, and the implementation of low carbon technologies such as CCS (Carbon Capture and Storage)?

A: There is no doubt that a low oil price conflicts with a signal to consumers to favor less carbon-intensive fuels over more carbon-intensive energy sources. Evidence shows that the relative levels of current coal and oil prices do not fully reflect, nor are they dictated by, the cost to society of carbon emissions or the cost of climate impacts.



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It remains to be seen how soon investors and market analysts will take actions and give market advice to further incorporate carbon risk and climate change impacts into commodity and share prices (either downward for carbonintensity or upward for lower carbon potential).

Government programs will continue to promote renewables and low-carbon technologies, and we expect such programs to expand significantly under the Paris Agreement. The whole carbon pricing initiative is ultimately aimed at incorporating the cost of carbon into asset valuations and commodity/share prices, and the Paris Agreement also promotes this through the market/non-market mechanisms text.

Question 8: Why aren't the baseline years (used by countries) uniform?

A: Because the Paris Agreement is a 'bottom up' process where each country adopted its own approach under national circumstances, there is no 'top down' requirement to use the same base year in each nation's NDC. The monitoring/verification/review and the stock take to be done under the Paris Agreement process going forward will seek to measure progress and compile results amongst NDCs in a manner that takes account of different base years.

Question 9: Will there be a penalty for non-compliance?

A: The Paris Agreement does not authorize the UNFCCC to impose penalties on nations for falling short of the commitments they made in NDCs. The UNFCCC will use the stock take and review process to point out which nations appear to be fulfilling their NDCs and which ones are falling short, then it will be a matter of negotiation between the nations themselves in future COP meetings to

decide what to do about that. As for individual companies, penalties for non-compliance – if any – would be a matter of national policies and measures in each country of operation.

Question 10: Who governs the reporting to ensure compliance and accuracy? What are the repercussions for lack of compliance?

A: Each nation must submit a national GHG inventory following Guidelines for National GHG Inventories issued by the Intergovernmental Panel on Climate Change (IPCC). The submission of national GHG inventories has been under way for a number of years and almost all countries are working to follow the IPCC Guidelines and improve the completeness and consistency of their national inventories. It is these established national GHG inventories that will form the basis for the UNFCCC to monitor progress in meeting NDCs. UNFCCC peer review teams review national inventories, identify issues and recommend areas for improvement. There are no penalties in this area.

Question 11: How are countries getting \$100 billion (of climate finance), will the countries tax industries to raise the funds?

A: The provision in the Paris Agreement calling on countries to contribute US\$100 billion per year (collectively) to climate finance is, like the NDCs, a 'bottom up' matter for each nation to decide how to fulfil in its own manner. The Paris Agreement does not dictate how countries are to raise the climate finance. To date, countries have mainly contributed to climate finance from general revenue in that country. The total level of climate finance actually delivered by governments is well below the level committed, so it remains to be seen where climate finance will come from in the future, but it will remain a national decision in each case.



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Question 12: Which energy source has the lowest GHG footprint - oil, natural gas, nuclear or coal?

A: At the point of combustion, a general ratio can be applied of 3:2:1:0 based on the carbon intensity of the fuels combusted where coal is '3', oil is '2', natural gas is '1' and nuclear/renewables are '0'. Under this rule of thumb, combusting the amount of fuel required to deliver the same amount of energy means coal is roughly 3 times more GHG intensive than natural gas, and oil is roughly 2 times more GHG intensive than natural gas. The actual GHG emissions involved from combustion can vary from this rule of thumb according to factors specific to the source/nature of the coal/oil/natural gas. The coefficient in the IPCC Guidelines for emissions of nuclear power and power generated from renewables is zero.

Question 13: How does Chinese government make huge coal based chemical investments in last several years in face of these objectives?

A: China has included the commitments behind their NDC in their Five Year Plan and insists that they will implement actions to achieve their NDC.

Question 14: How does ERM think CCS (carbon capture and storage) will be assessed and incorporated into NDC's?

A: The fact that little emphasis has been placed on CCS in the NDCs does not mean that countries are not considering CCS. Many, even most, NDCs are a framework for action and do not spell out the approach to specific mitigation options such as CCS. The IPCC Guidelines for National Inventories explicitly recognize CCS and provide a method for emission mitigated by CCS projects to be included in the national inventories that provide the basis for measuring countries' progress in GHG mitigation.

Question 15: Who governs the reporting to ensure compliance and accuracy? What are the repercussions for lack of compliance?

A: The rules for reporting GHG emissions are a national responsibility and there will be some variation between different countries' approach to GHG reporting, especially since compliance will be a function of each country's specific policies and programs. Repercussions from lack of compliance will be defined by each country's policies and programs. For businesses operating across different countries, it will be necessary to adjust and tailor their reporting and compliance needs according to each nation's system.

Since reporting requirements across different countries will likely vary, having robust data management systems in place to manage reporting will be critical for compliance. ERM has worked with many of our clients to develop environmental management information systems (EMIS) and these will need to be adapted for managing varying reporting requirements across countries.

Question 16: Could you clarify the nature of the US commitment? How could COP commitments that exceed regulatory compliance targets be met without congressional approval?

A: The Paris Agreement was, as we have been told, designed in a manner so that the US can 'accede' to the Agreement under Executive action without requiring Senate approval of a 'treaty'. Meeting the commitments in the US NDC will be completely reliant upon US policies and programs such as the Methane Initiative, the Clean Power Plan, renewables programs, CAFE standards, etc.



About ERM





ERM is one of the leading sustainability consultancies worldwide, providing environmental, health and safety, risk and social consulting services in influential assignments.

ERM employs over 5000 people globally in over 160 offices in 40 countries. We have over 40 years of experience in the field with in-depth subject matter and sector experience. Over the past five years we have worked for more than 50% of the Global Fortune 500 companies across the world.

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