



# FROM PARIS TO MARRAKESH: THE WINDING ROAD TO A GLOBAL AGREEMENT

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There are some fundamental steps companies should undertake to reduce risks and enhance opportunities under the current global carbon policy. In this article, we will explore the current state of climate change policy and recommend steps to comply and, more importantly, create competitive advantage.

## *From pledges to actions*

The 21<sup>st</sup> Conference of Parties (COP 21) under the United Nations Framework Convention on Climate Change in Paris was hailed as a success for reaching a historic agreement to tackle climate change and transition toward a cleaner global economy, but the road to limit global warming below the 2-degree Celsius threshold (and possibly pushing to 1.5 degrees) is still challenging and not straightforward.

There is a lot of justified optimism, as an overwhelming number of countries (187), including all the major emitters, have submitted their Intended Nationally Determined Contribution (INDC) in reducing their Greenhouse Gas emissions (see Table 1). The same countries now need to move to Nationally Determined Contribution (NDC) and officially consent to be bound by it. To make the agreement effective, at least 55 parties, representing a minimum of 55 percent of the total global emissions, will need to go through a domestic political process to ratify it. That process can be difficult.

Country	Commitment
U.S. <sup>1</sup>	To achieve economy wide emissions reductions of 26-28 percent below 2005 levels by 2025.
Russia <sup>2</sup>	To limit anthropogenic greenhouse gases to 70-75 percent of 1990 levels by the year 2030, as long as this target aligns with the maximum possible absorption capacity of its forests. This would represent a 20-25 percent cut in emissions.
China <sup>3</sup>	<ul style="list-style-type: none"> <li>To peak its total carbon dioxide emissions by 2030 or earlier</li> <li>To increase non-fossil fuel consumption to comprise around 20 percent of its total energy mix by that same year</li> <li>To lower carbon dioxide emissions per unit of GDP by 60 to 65 percent from 2005 levels</li> <li>To increase forest stock volume by around 4.5 billion cubic meters from 2005 levels</li> </ul>
India <sup>4</sup>	<ul style="list-style-type: none"> <li>To reduce the emission intensity of GDP by 33 to 35 percent below 2005 levels by 2030</li> <li>To achieve non-fossil fuels in its electrical mix to 40 percent installed capacity by 2030 with the help of transfer of technology and low-cost international finance including the Green Climate Fund (GCF)</li> <li>To add a carbon sink for 2.5 to 3 billion tons of CO2 by 2030 through forest and tree cover.</li> </ul>

**Table 1 - INDC submitted by large emitters**

<sup>1</sup> <http://www.theroadthroughparis.org/country-profiles/united-states-america>

<sup>2</sup> <http://www.wri.org/blog/2015/04/russia%E2%80%99s-new-climate-plan-may-actually-increase-emissions>

<sup>3</sup> <http://www.theroadthroughparis.org/country-profiles/china>

<sup>4</sup> <http://www.theroadthroughparis.org/country-profiles/india>



The COP 22 planned for November 2016 in Marrakesh, Morocco, will be the checkpoint to verify the status of pledges, ratifications and commitments. The focus at the conference will be on the implementation and operationalization of the agreements reached in Paris related to carbon markets and carbon pricing, climate finance, how to address losses and damages, and reporting against commitments.

The next COP will represent a fundamental step in bringing Africa into the game, leveraging carbon finance pledges and fostering innovation in energy efficiency and renewable energy to build opportunities for a sustainable development of the African economy. A good example of how African nations are progressing is coming from Morocco, the hosting country. Morocco is committed to reduce GHG emissions by 32 percent by 2030 in its INDC and reach a 50 percent of installed energy generation capacity coming from renewables by 2025. A first important step in this direction is the Noor-Ouarzazate concentrated solar power (CSP) plant which will be the world's largest of its kind with an installed capacity of 500 MW in 2018. The first phase of the project has been recently completed.

### ***A role for the private sector***

Reducing carbon dioxide emissions is subject to a political debate, which can lose sight of the real aim of reducing GHG emissions. This can waste time and lead to compromises that only address part of the problem. However, one of the key outcomes of the Paris COP is the growing role and commitment of the private sector, independent of legislation.

According to a Carbon Disclosure Project (CDP) survey<sup>5</sup>, 800 of the largest listed companies in the world pledged their support for a legally binding agreement in Paris and for an ambitious target of net zero emissions well before the end of the century. One hundred twenty large corporations, representing combined annual emissions of around 500 million tonnes of CO<sub>2</sub>, committed to set climate science-based reduction targets; the list includes Coca Cola, Dell, General Mills and Procter & Gamble. Those companies have already published their targets.

Another recent survey from Ernst & Young confirmed that there is a growing consensus in the business community for carbon pricing, with more than 430 companies declaring they have already set a carbon price to use in the internal decision making process<sup>6</sup>. Fifty four percent of survey respondents agreed that putting a price on carbon is the most effective way to curb GHG emissions. There is a widespread expectation that carbon pricing mechanisms will be implemented soon across the largest economies. Organizations that have been operating in a context where a carbon price has already been in place (e.g. under the EU Emissions Trading Scheme) will undoubtedly realize competitive advantages.

### ***Preparing for a carbon constrained future***

What should companies do to prepare for the upcoming climate challenge and to be part of the solution?

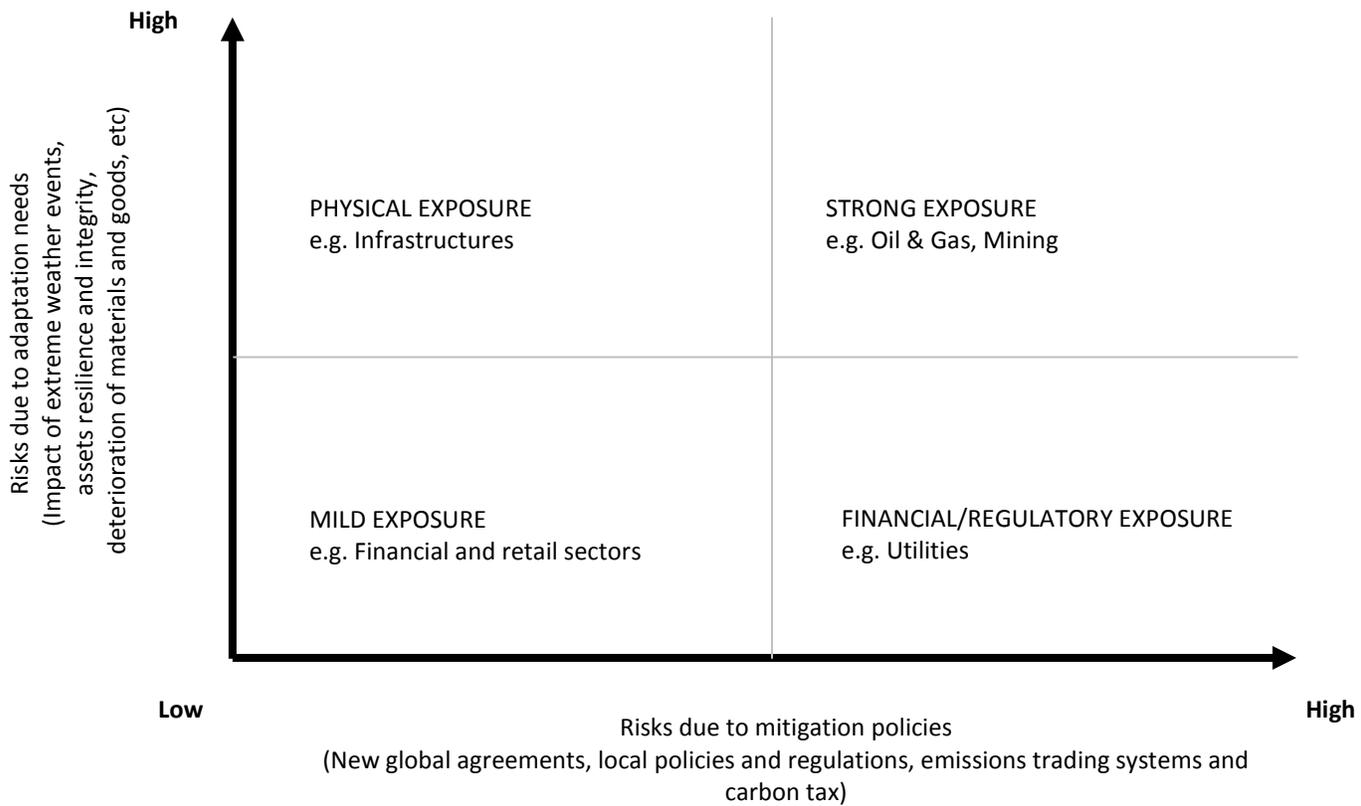
Each company, depending on its industrial sector, the countries where it operates and the nature of goods and services provided, will first have to assess its level of direct exposure to the climate risk (see Figure 1) and look for appropriate responses.

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<sup>5</sup> <http://www.cdp.net/Documents/policy/corporate-support-global-agreement-on-climate-change.pdf>

<sup>6</sup> Shifting the carbon price debate, EY 2015

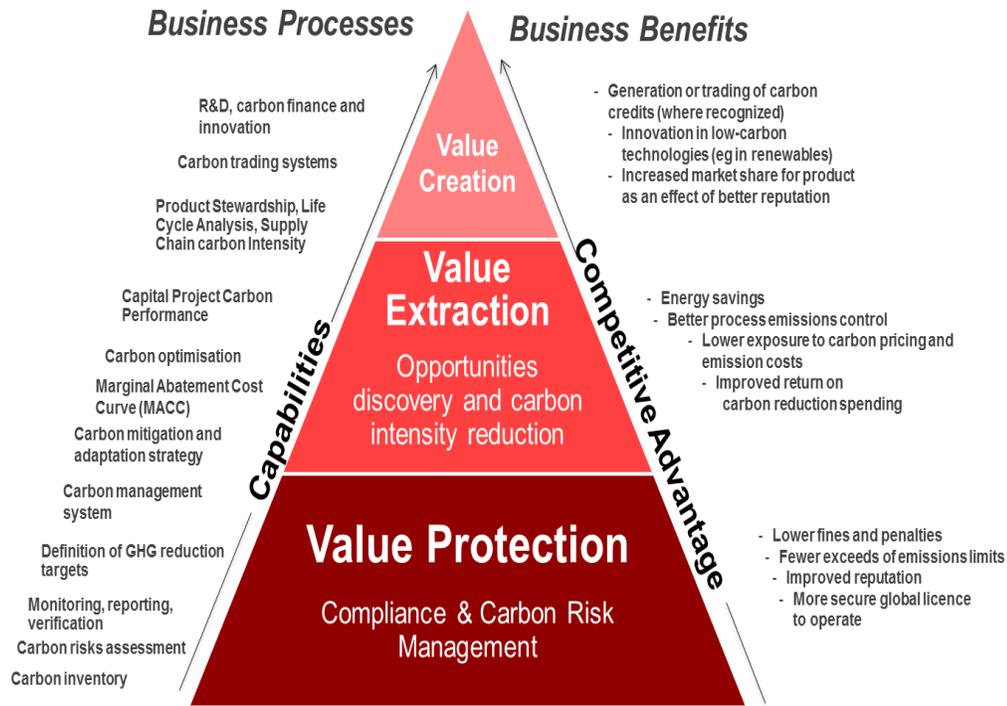
**Figure 1 – Exposure to Carbon Risks**



A second aspect to consider is reputation. Companies should ask themselves, “What are our stakeholders (shareholders, investors, employees, local communities, government, peers, customers, suppliers) expecting from us?” Independent from the level of compliance required, there has been increasing pressure from these groups for companies to adopt low-carbon strategies

Then, “what are the climate risks and opportunities affecting our value chain and how can we create value?” The next figure (Figure 2) suggests a possible path from value protection to value creation in carbon management.

**Figure 2 – The Carbon Journey: from value protection to value creation**



### **An implementation plan**

There are some fundamental steps companies should undertake to reduce risks and enhance opportunities under the current global carbon policy context

1. **Get the numbers right.** A robust carbon inventory, updated on the basis of the most reliable international protocols and emissions factors, is key since “we cannot manage what we cannot measure.” The inventory should be informed by the principles of completeness, transparency, comparability and accuracy.
2. **Design a monitoring, reporting, verification system (MRV).** Any carbon reduction strategy needs a system that regularly updates, reviews and allows prompt and accurate reporting of GHG emissions data, normally required for compliance reasons. While external verification/assurance can be required by regulation, voluntary assurance has always proven to be effective as a third-party check of the completeness and accuracy of reported emissions. This can be required by company boards as a risk-control tool and responds to transparency requirements from external stakeholders. To pass the assurance test, a robust audit trail including evidence, calculation methodologies and assumptions taken should be kept in a documented and systematic way.



3. **Define reduction targets and carbon management system.** A credible reduction commitment should be based on clear and measurable targets. Targets must be achievable and aligned with international policies. Carbon management systems will codify policies, procedures and record keeping to prepare for a carbon strategy.
4. **Develop an adaptation and mitigation strategy.** Climate change is already impacting companies' assets, especially where they are located in proximity to water shores or exposed to extreme weather events. Adapting means considering climate concerns when finding the best location for operations and productions, designing more resilient structures and equipment, and having contingency plans in case of unexpected calamities. An *adaptation* strategy should start from a thorough risk assessment and budget for investment to protect assets. A carbon *mitigation* strategy will look at compliance risks, effects of carbon pricing and define emissions reduction actions. The development of marginal abatement cost curves (MACC) will help decision makers in identifying initiatives and investment which obtain the best outcome with the lowest cost. In an emissions trading context, MACC will help in applying 'make' (invest internally in GHG reductions) or 'buy' (purchase available credits to comply with legislation requirements) decisions. Investments in renewable energy sources replacing fossil fuel energy generation are a key option to explore. A mitigation strategy can include a trading strategy under emissions trading systems.
5. **Access carbon finance.** Carbon finance is increasingly available at a public and private level, sometimes supported by the generation of emissions credits as loan securities. Advanced financial instruments can be activated by international climate finance, especially in developing countries, where there is a need for technological transfer. Available finance will trigger innovation, investment in low carbon technology and open a wealth of opportunities to savvy carbon conscious enterprises.

Like any organizational improvement, an improvement plan requires step changes in performance that start at the top. The carbon journey needs to be backed by a positive culture and strong leadership commitment; the kind of leadership that is visible through actions and demonstrates that controlling climate change is part of the company's core values. Resulting from this, the transformation will pervade, and over time, a healthy culture translates into competitive advantage.

### **DuPont's Commitment**

Leading to the Paris conference, DuPont joined 100 other large businesses in the United States and signed the advertisement "Business backs low-carbon USA"<sup>7</sup>. The pledge demonstrates DuPont's commitment to do its part in reducing global emissions. From 1990 to 2013, DuPont has been able to decouple growth and emission generation, dramatically reducing the carbon intensity of its productions. As a result of this, DuPont's production grew by 47 percent, and total carbon emissions went down by 51 percent. DuPont will further reduce its non-renewable energy use by 10 percent per price adjusted dollar revenue compared with the 2010 baseline by 2020. By the same year, DuPont is committed to further reduce its GHG intensity by 7 percent, calculated on the 2015 baseline.

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<sup>7</sup> "Business backs low-carbon USA", encourages a fair global deal to keep global temperature rise below 2 degrees and supporting action to decrease US GHG emissions and investment in a low carbon economy.



## About DuPont Sustainable Solutions

DuPont Sustainable Solutions brings customers the benefits of integrated global consulting services and process technology enterprise. It applies DuPont's experience, history of innovation, problem-solving success, and strong brands to help organizations transform their workplaces and work cultures to become safer, more efficient and more environmentally sustainable. Additional information is available at: [www.sustainablesolutions.dupont.com](http://www.sustainablesolutions.dupont.com).

DuPont has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials, and services since 1802. The company believes that by collaborating with customers, governments, NGOs, and thought leaders, we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment. For additional information about DuPont and its commitment to inclusive innovation, please visit: [www.dupont.com](http://www.dupont.com).