



COP21, The Force Awakens

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After four years of hard work, the COP21 has culminated in a climate agreement that was accepted by 195 countries. This agreement is the first to involve all world economies in the fight against climate change. Beyond the pledges made by the governments, the COP21 also aimed to highlight solutions that are backed by the private sector. A testimony to companies' determination to become a part of the movement, several initiatives were launched in a wide range of sectors over the course of the two conference weeks.

Responding to these transformations, the financial sector also made several announcements, promising that it would divest from the most polluting energies, increase investments in clean technologies, stimulate financial innovation (green bonds, LDN) and measure carbon footprints. Investors have understood once and for all that they must adapt their investment strategies if they want to face up to the challenges of the current transition to a low carbon economy.

On Saturday 12 December 2015, 195 States agreed on a text that aims to reduce global greenhouse gas (GHG) emissions. The Paris deal marks an apogee after four years of work since the 2011 Durban Climate Change Conference. After the 'failure' of the Copenhagen Summit in 2009, a fresh page has been turned, allowing for a global agreement in 2015.

What does the agreement achieve?

The 2°C Target Confirmed and Even More Ambitious

Participants first of all agreed on the goal of maintaining the global average temperatures increase at no more than 2°C above pre-industrial levels, a target the majority of governments had already underwritten at the Copenhagen Summit. The novelty of the COP21 agreement is that it goes beyond Copenhagen, committing governments to reaching the 1.5°C target.

Common but Differentiated Responsibilities

As for the previous UN texts, the Paris agreement still mentions the 'common but differentiated responsibilities' according to countries' level of development. While Kyoto focused mainly on developed countries reducing emissions, the Paris agreement has succeeded in persuading all countries

to commit to fighting climate change; this includes China, the world's top emitter today. Together with China's commitment, and thanks to the Obama administration's increased awareness of climate issues, the United States have also been included in the agreement. The fact that two of the largest world economies as well as the European Union have committed to fight climate change, has created a real knock-on effect for the rest of the world.

Robust Commitments

In a bid to avoid the pitfalls of previous negotiations where governments failed to agree on a common definition of their objectives, the approach adopted was to leave governments free to define their Intended Nationally Determined Contributions (INDC) themselves.







Table1: Examples of Intended National Commitments

Country	Targets
United States	26%-28% below 2005 levels by 2025
European Union	At least 40% reduction by 2030 vs. 1990
China	By 2030: - Invert the CO ₂ emissions curve by 2030 and make the best possible efforts to reach this target earlier - Reduce CO ₂ emissions per unit of GDP by 60% to 65% - Reach 20% in non-fossil energy in primary energy consumption - Increase forest resources by around 4.5 m ³ relative to 2005
India	- Reduce CO_2 emissions by 33% to 35% per unit of GPD unit by 2030 relative to 2005 - ~40% of cumulated power installed to be generated from non-fossil sources by 2030 - Create additional carbon sinks for 2.5 to 3 Gt of CO_2 by forest plantation by 2030
Japan	26% reduction by 2030 relative to 2013

Source: Mirova based on WRI 2015

Some observers have voiced concerns that these targets are not mandatory. But sanctions regularly became sticking points in negotiations. The Kyoto Protocol has also shown how inefficient they are: when Canada failed to achieve its reduction targets, it simply decided to withdraw from the protocol so as to avoid paying a fine.

It should also be noted that the pledges submitted by the States still come as part of a +3.5°C scenario. Reaching the 2°C target will thus require additional efforts by governments.

Targets to be Reviewed Every 5 Years

In a move to create a framework that encourages raising the bar for emission reduction ambitions, the agreement provides for an update of pledges every 5 years, the first update being scheduled for 2020.

Finances

The plans for setting up a green fund of \$100 bn a year by 2020, which were presented earlier at the Copenhagen Summit, have now been confirmed. The fund will be financed

by developed countries and aims to help developing countries reduce their emissions and adapt to the consequences of climate change.

A galvanization of the private sector...

Beyond achieving an agreement between governments, the COP21 has allowed the private sector to demonstrate its ability to provide solutions to the challenges of climate change. Over the 11 days of negotiations, there was a flourish of announcements on new developments in those sectors of the economy that are linked to energy¹.

Figure 1: Greenhouse Gas Emissions by Sector 2010 (Total: 49 Gt CO₂ eq) Building Transport Transport 0.3% Building Industry 21% Agriculture & Deforestation Energy. 1% (excluding Industry electricity and Agriculture & Energy heat Deforestation 10% 24% Source: Mirova based on (IPCC, 2014)

Energy

In terms of energy, 3 major initiatives defined the COP21

- The 'Terrawatt Initiative' which aims to raise 1 trillion dollars for the construction of one terawatt (1000 GW) of solar capacity. This initiative comes after the Indian Prime Minister and the French President announced they would back an international coalition to develop solar energy in countries lying between the tropic of Cancer and the tropic of Capricorn.
- The 'Breakthrough Energy Coalition', which is backed by Bill Gates and supported by 28 major entrepreneurs, is to assemble several billion dollars to finance companies

¹See Mirova, 2015, Which technologies can build a low carbon economy?







developing innovative solutions for generating clean energy.

 Lastly, the RE100 initiative seeks to encourage companies to use green electricity to 100%. Over 50 big international groups like Google, BMW, H&M, Kingspan and SAP have already confirmed that they will participate.

Mobility

In the transport sector, which makes up for around 15% of global greenhouse gas emissions, a number of players in the sector have committed themselves to supporting the emergence of low carbon mobility.

Players such as Tesla, Renault Nissan, the United Nations Environment Programme (UNEP), the International Energy Agency (IEA) and other representatives of civil society launched the 'Paris Declaration on Electro-Mobility and Climate Change & Call to Action'. Its signatories are committed to making the greatest efforts possible in raising the share of electric vehicles to 20% of automobiles in circulation by 2030; this target is part of reaching a 2°C scenario.

Furthermore, the WBCSD (World Business Council for Sustainable Development), an umbrella organisation for the biggest international companies working on sustainable development issues, has published figures for its targets in the industry:

- To replace 10% of fossil fuels by low carbon fuel by 2030,
- To halve emissions from goods transport by road by 2050.

Buildings

In the building sector, which accounts for (~18% of global greenhouse gas emissions, 60 professional organisations and 18 governments have announced that they are launching a 'Global Alliance for Buildings and Construction' in a bid to reach 220 billion dollars invested in energy efficiency by 2020, i.e. a 50% increase relative to 2014. The Alliance notably seeks to encourage dialogue between a number of actors in the sector, many of them local.

The WBCSD has also fixed a sector-specific target to reduce the energy consumption of buildings by 50% by 2030.

Industry

There have been far fewer announcements in industry, which accounts for ~33% of greenhouse gas emissions. Since the

sector has already made several attempts to reduce emissions, the potential for future reduction is limited here. Nevertheless, it should be noted that the following targets have been announced:

- to set up 500 to 1000 projects for CO₂ capture and storage (CCS) by 2030,
- to reduce the emissions in the chemical industry by 1 Gt CO₂ eq. a year by 2030,
- to reduce cement emissions by 20 to 25% by 2030 relative to the Business as Usual scenario.

Agriculture and Forestry

Lastly, the agricultural industry, which makes up for 25% of greenhouse gas emissions, was also highlighted during the COP, notably thanks to the 4 per 1,000 initiative which aims to increase carbon stocks inagricultural soils, and thanks to the announcement of an emission reduction target for the sector of at least $3.7~\rm CO_2$ eq by 2030. There has also been greater support for other initiatives, for example the Great Green Wall project which was launched in 2007 by the African Union and which aims to slow down land degradation in the Sahel desert from Mauritania to Eritrea.

...that is pushing the financial sector to change its understanding of the economy

Taking these economic evolutions into account, the financial sector is beginning to adapt its strategies so as to confront change. The sector took advantage of the COP21 as a platform for launching several initiatives with a wide range of approaches that reach from excluding the most polluting companies, over creating more efficient financing solutions for the energy transition, and to finding a better measurement of their exposure to carbon.

- Uniting a total of \$4,000 bn, 100 banks and one investor group have promised to increase loans for funding energy efficiency.
- Many players have asserted that they wish to develop the green bonds market so as to create a market of \$500 bn p.a. (as opposed to 38 at the moment).
- 23 investors with \$600 bn in equities have joined the Portfolio Decarbonization Coalition.







- With a total of over \$3,000 bn of funds under management, many investors have promised to exit from carbon.
- Uniting a total of over \$10,000 bn, 120 investors have promised to measure their carbon footprint (Montréal Carbon Pledge).
- The United Nations Environment Programme (UNEP) has launched a fund which is open to private investors and which aims to achieve land degradation neutrality (LDN).

"...once climate change becomes a defining issue for financial stability, it may already be too late."

Mark Carney, Governor of the Bank of England and President of the FSB, October 2015

It should also be noted that the Financial Stability Board (FSB) is involved. Established after the G-20 summit in 2009, it is charged with forging better cooperation in supervising and monitoring financial institutions. The FSB announced that it would be creating a working group directed by Michael Bloomberg so as to improve reporting on carbon risk.

What Happens Now?

The players who have participated in these initiatives, whether they be private companies or players from the financial sector, closed the COP21 with the *L'Appel de Paris* (Paris Pledge for Action). By joining the Pledge, non-state actors demonstrate that they are ready to 'ensure that the ambition set out by the Paris Agreement is met or exceeded to limit global temperature rise to less than 2 degrees Celsius'.

For several years now, a number of elements have led us to think that the transition to a low carbon economy is well underway: renewable energies have been becoming far more competitive, carbon has been slowing down, clean solutions such as the electric vehicle and technologies for intelligent building management systems have taken off, and so on. The COP21 heralds a new era.

The transformations underway are far-reaching and it will take another several years before they can invert the emission increase. But the Paris agreement sets a clear course: the economy to come will not be in the image of the economy of the last 50 years, which was based on fossil energy and increased energy consumption. Investors are looking to adapt to this new set of facts. Even if these transformations will not have an immediate impact on the performances of the companies, the world of finance is starting to adapt its investment strategies so as to confront the transition we are experiencing.







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