From COP21 to COP23:

Developments in business and investments since the 2015 Paris Agreement

OPINION COLUMN

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The 2015 Paris Climate Agreement and its limitations

After more than two decades of failed attempts to reach global consensus on climate change, a historic agreement was reached in Paris on 12 December 2015 at the 21st Conference of the Parties of the United Nations Framework Convention on Change (UNFCCC - COP21). 197 countries signed the agreement which became legally binding about a year later, after countries responsible for 55% of global greenhouse gas emissions ratified it. 169 UNFCCC members have ratified the agreement to date.

Signatories agreed to keep the overall increase in global temperatures to below 2°C (beyond which, the impact of climate change is expected to be catastrophic), to try to limit the increase to 1.5°C, and to achieve zero net emissions in the second half of this century. In their Nationally Determined Contributions (NDCs), every signatory offered voluntary emission targets and set out their mitigation strategies to achieve these goals. They also agreed to a five-yearly review of their plans. Targets are expected to be tightened at each successive review.

While the NDCs are not legally binding, signatories are legally subject to expert review to ensure their progress towards achieving NDC goals.

Both developed and developing nations must report on their mitigation efforts every two years, and all signatories will be subject to both technical and peer review[1].

However most countries' NDCs are not as robust as they need to be, and scientists have confirmed that even if all countries acted on everything they have pledged, global warming of 2.7 to 3.7°C[2] would still occur.

The Paris Agreement minus the United States, including industry reactions

COP22 took place in Marrakesh in 2016, with two weeks of talks to establish ways to implement the actions pledged under the Paris Agreement. Whilst many countries reaffirmed their support for the accord, the election of Donald Trump cast a long shadow over negotiations. During his election campaign President Trump pledged to withdraw from Paris agreement and revitalise the coal industry.

President Trump announced his intention to pull the United States - the world's second-largest emitter of carbon - out of the Paris agreement in June 2017. He stated that the agreement imposed unfair environmental standards on American businesses and would cost American workers in the coal, steel and other manufacturing industries their jobs. At the beginning of October 2017 the Trump administration went further by announcing its decision to repeal former president Barrack Obama's Clean Power Plan to cut greenhouse gas emissions from power plants. This resulted in widespread international discontent from scientific communities, the business world and from civil society.

Corporate America voiced its opposition, urging President Trump not to withdraw from the Paris Agreement. Executives from the oil, power, retail, transportation and technology industries claimed their companies were pursuing a lower-emissions trajectory driven in part by market forces (cheaper prices for natural gas and wind power), but also by expectations from investors, activists and customers along with pressure from regulators both nationally and internationally[3].

Over 1,000 American companies and investors with over 1.2 trillion USD in annual revenue have now signed the Business Backs Low-Carbon USA statement, requesting continued support for low-carbon policies to meet national climate targets[4]. In addition, 111 companies including global brand names such as Google, Apple, Microsoft, Unilever, and Tata Motors have now joined global initiative RE100 committed to using 100%

1 Paris Agreement - United Nations - 12 December 2015

2 "Paris Agreement climate proposals need a boost to keep warming well below 2°C", Rogelj et al, Nature International Weekly Journal of Science - 2016

3 "Companies on Climate: Trump or No, Still Cutting Emissions" - The Wall Street Journal - December 2016

4 "Business Backs Low-Carbon USA" statement - Low Carbon USA website - accessed October 2017

renewable electricity[1]. Google announced that its' global operations will reach 100% renewable energy in 2017.

The U.S. power sector is also on course for significant energy transformation, driven by market forces and the rapidly falling cost of clean energy technologies and state-level clean energy leadership. Many old coal power plants are being discontinued or converted to natural gas, whilst new coal plants are no longer built because they have become more expensive than natural gas, wind, and solar energy.[2]

Despite accelerated decarbonisation, researchers at the federal government's Lawrence Berkeley National Laboratory concluded that even if the U.S. achieved all current and proposed carbon-cutting federal policies, the country would still miss its 2025 target by about 20% of the nation's total emissions[3]. New federal policies and mandates are required for the US to meet Paris targets of reducing emissions by 26–28% below 2005 levels by 2025. Current US policies, including the Clean Power Plan, would only reduce emissions to 10%[4]. However all major industrialised countries are failing to meet the pledges they made to cut greenhouse-gas emissions[5].

1 RE100 Initiative website - accessed October 2017 - http://there100.org/companies

2 "A Dwindling Role for Coal: Tracking the electricity section transition and what it means for the nation" - A Union of Concerned Scientists - September 2017

3 Trump Backtracker - Climate Advisors - September 2017 update; Climate Action Tracker's Rating for the USA - September 2017

4 "Assessment of the climate commitments and additional mitigation policies of the United States" - Jeffery B. Greenblatt & Max Wei Nature Climate Change magazine - September 2016

5 "Prove Paris was more than paper promises" - David G. Victor, Keigo Akimoto, Yoichi Kaya, Mitsutsune Yamaguchi, Danny Cullenward & Cameron Hepburn - Nature magazine - August 2017

Climate related risks for companies and investors

As the energy transition movement gathered momentum, some financial institutions began questioning whether their investments would be viable in a world where temperatures rose above 2°C globally.

The phrase 'energy transition' implies movement away from fossil fuel energy and its related physical assets, and could have significant financial implications for organisations that extract, produce and use coal, oil, and natural gas. However, climate-related risks and the expected transition to a lower-carbon economy will in fact affect most economic sectors and industries. Companies will be exposed to a diverse range of risks, from extensive changes to policy, technology and markets to risks related to the physical impact of climate change (for example damage to assets and questions over employee safety, resulting from the increased severity of extreme weather events, rising sea levels and average temperatures). The potential financial impact of these risks include increased operating costs (for example higher compliance costs and increased insurance premiums), write-offs, the early retirement of existing assets due to policy changes and increased costs resulting from fines and regulations[6]. There are now over 1,200 climate change-related laws worldwide and the number of climate litigation cases is rising. As of March 2017, 654 climate change cases had been filed in the U.S. and over 230 cases had been filed in the rest of the world[7]. The reasons for litigation include failure to mitigate against the impact of climate change, failure to adapt to climate change, and insufficient disclosure of material financial risks.

Notable recent cases include lawsuits brought by five Californian cities in July and September 2017 against 'carbon majors' (including Chevron Corp., ConocoPhillips, ExxonMobil, BP and Royal Dutch Shell), seeking compensation for the current and projected costs of adapting to sea level rises linked to climate change. Imperial Beach suggests potential damage to property caused by coastal erosion could be over 106 million USD. Marin County estimates that nearly 16 billion USD worth

6 "Recommendations of the Task Force on Climate-related Financial Disclosures" - Financial Stability Board - June 2017

7 "The status of climate change litigation" - United Nations Environment Programme - May 2017

of homes and businesses are under threat, whilst San Mateo claims that 24 billion USD worth of assets are at risk.

Among other claims, the California cases fall under a legal doctrine known as 'public nuisance'. This states that under common law, the companies have damaged both the counties and city of California by contributing to rising sea levels, resulting in more frequent and severe flooding. The lawsuit claims that companies have known for nearly 50 years about the impact of greenhouse gas emissions on climate and rising sea levels, but rather than working to reduce their climate impact, companies have engaged in a 'co-ordinated, multi-front effort to conceal and deny their knowledge of these threats'[1].

As the losses and damages caused by climate change increase in value, the cost of inaction and risk of litigation are also likely to increase. However, more than half of the 497 institutional investors in Europe, the Americas, Asia and the Middle East surveyed by HSBC said they were receiving 'highly inadequate' information from companies about the risk of disruption from climate change, as well their ability to benefit from the shift to low-carbon technologies[2]. In addition from an investor's perspective, failure to consider the financial impact of climate change in investment portfolios could lead to inaccurate decision making around investments, lending, insurance and market regulation.

To help identify the information needed by investors, lenders, and insurance underwriters to appropriately assess and quantify climate-related risks and opportunities, the G20 Financial Stability Board established the Task Force for Climate-related Financial Disclosures TFCFD in January 2016. In June 2017 the Task Force released a series of recommendations setting out consistent, voluntary disclosures. The recommendations provide guidance so companies may disclose clear, comparable and consistent information about the risks presented by climate change[3]. However, there are concerns that companies with higher climate change impact will not comply with this voluntary disclosure framework and that a mandatory approach has the best chance of success.

Some jurisdictions are already progressing this concept, for example France's Article 173 on energy transition. This 2015 law requires institutional investors to provide the carbon footprint of their investments and to disclose their climate change related risks. Investors are also required to disclose the consequences of climate change on company activities, the use of the goods and services it produces, and report on the steps they are taking to limit global warming.

In California, insurance regulators launched the Climate Risk Carbon Initiative, requiring insurance companies with annual premiums of 100 million USD doing business in California to disclose fossil fuel investments, and asking all insurance companies doing business in California to divest from thermal coal investments. According to data disclosed in January 2017, insurers have 521 billion USD in fossil fuel-related securities, which include investments in coal, oil, gas and utilities that rely on coal, oil and gas, and 10.5 billion USD worth of investments in thermal coal enterprises. The California Department of Insurance claims that more than 4 billion USD has already been divested by insurers from thermal coal and other fossil fuel investments, and a further 881 million USD has been committed to be divested from thermal coal investments.

Insurer responses revealed that 670 companies divested some or all of their coal holdings, or had no coal holdings to divest, and 325 companies acknowledged that they would refrain from making future investments in thermal coal[4].

1 "Exxon, Shell and other carbon producers sued for sea level rises in California" - The Guardian - July 2017

2 " Growing investor appetite for green assets puts pressure on companies to explain their climate strategies" - HSBC - September 2017

3 "Recommendations of the Task Force on Climate-related Financial Disclosures" - Financial Stability Board - June 2017

4 "Commissioner discloses insurers' carbon investments facing climate risk" - California Department of Insurance - January 2017

Corporate first steps towards a low carbon economy

Business plays an important role in mitigating the effects of climate change by reducing greenhouse gas (GHG) emissions. In its recent report, CDP, an organisation supporting companies, cities, states and regions to disclose, measure and manage their environmental impacts, published a global analysis[1] of 1,073 companies (representing 12% of direct GHG emissions globally). This report shows that companies are increasingly proactive in addressing climate issues. Driven by the Paris Agreement, more leading companies are embedding low-carbon goals into their long-term business plans. In 2017, 89% of the world's largest and highest-emitting companies reported emission reduction targets; 74% of these targets account for over 80% of a company's total emissions. Over two-thirds (68%) of the companies have carbon emission reduction targets up to 2020 or beyond, whilst 20% have set targets to 2030 or beyond. There has also been a 20% increase in companies offering low-carbon products and services, and more and more companies are showing a commitment to renewable energy and carbon pricing.

Vigeo Eiris identified the following good practice examples in its last survey of the Electric & Gas Utilities sector[2]:

Portuguese energy company EDP has set an objective to increase the share of its renewable energy installed capacity to more than 75% of its total installed capacity by 2020. In terms of notable practice, EDP has an installed capacity of Combined Cycle Gas Turbine (CCGT) technology which represents 51.5% of the company's total fossil-fuel based installed capacity.

Iberdrola has committed to investing 8 billion Euros in renewable energy in 2016-2020 and to reducing the intensity of its emissions to 30% below its 2007 level by 2020, and by 50% by 2030 to 150 gCO2/kWh. As of 2016 Iberdrola's renewable energy capacity represented 58.4% of the company's total installed capacity. The share of CCGT in thermal installed capacity stood at 74.2% while the share of Combined Heat and Power (CHP) stood at 81.5%.

Vigeo Eiris has also observed changes in practise by investors and financial companies. For example, in October 2017, BNP Paribas announced a new global financing policy with regard to the exploration, production and transportation of non-conventional hydrocarbons. The bank stated that it will no longer finance projects that are predominantly involved in transporting and exporting oil and gas from shale and oil from tar sands. It will also no longer finance oil or gas exploration or production projects in the Arctic region[3].

COP23 expectations

The 23rd session of the Conference of the Parties to the United Nations Framework on Climate Change will take place from 6-17 November in Bonn, Germany and will be presided over by the Government of Fiji. Governments will work on regulations for implementing Paris Agreement actions. COP23's key areas of focus include resilience building for all nations vulnerable to the impact of climate change, innovations in clean technology, increasing access to finance for climate adaptation measures, renewable energy, clean water, affordable climate risk insurance, and promoting sustainable agriculture[4]. Progress will need to be made in all these areas to ensure the guidelines can be completed by COP24 in Poland in 2018.

Signatories will also need to create a clear roadmap to guide the 2018 Facilitative Dialogue process (FD 2018). This dialogue will take stock of signatories' collective effort towards the long-term goal of limiting global temperature rise to 1.5-2°C and is intended to inform the next round of Nationally Determined Contributions (NDCs). The FD 2018 process represents a crucial opportunity for countries to reaffirm their collective commitment to new or more ambitious NDCs by 2020 that reduce the emissions gap even further and get us closer to reaching zero net greenhouse gas emissions by the second half of the century.

1 https://www.cdp.net/en/research/global-reports/tracking-climate-progress-2017

2 Vigeo Eiris Electric and Gas Utilities sector survey 2016/10

3 Vigeo Eiris Confirmation Alert : "BNP Paribas announces new measures to accelerate its support of the energy transition"

4 COP23 Provisional Agenda - UNFCCC website - accessed October 2017

How does Vigeo Eiris' methodology assess companies' management of climate risk and opportunity?

Vigeo Eiris uses the following criteria to assess companies' management of risks and opportunities related to climate change:

In the sustainability driver **'Development of green products and services',** companies are checked for:

- Conducting R&D and market research on green products and services
- Developing and marketing green products or services

In the sustainability driver **'Management of energy consumption and greenhouse gas emissions'**, companies are checked for:

- Their commitment to reduce energy consumption and associated greenhouse gas emissions
- Measures undertaken to reduce energy consumption and related GHG emissions and their coverage
- Energy consumption and greenhouse gas emission performance over time

All sectors and industries are researched against these criteria, including the most carbon intensive oil and gas, electric and gas utilities, automobile, chemicals, metal, food and beverages, and waste and water utilities sectors.

In the sustainability driver **'Management of Atmospheric Emissions'**, our analysis focuses on companies' ability to control atmospheric emissions unrelated to energy consumption, such as greenhouse gases (GHG), Volatile Organic Compounds, Persistent Organic Pollutants, hazardous substances that have an impact on the ozone layer.

In the sustainability driver **'Management of the environmental impact of transportation'** we assess the extent to which a company considers the environmental impact of its products' transportation and the actions implemented to reduce this impact.

In the sustainability driver **'Management of the environmental impact from the use and disposal of products/services'** companies are assessed on the steps taken to directly or indirectly control their environmental impact related to the use and disposal of products or services.

In the sustainability driver **'Physical Impact of Climate Change'** we analyse companies' ability to assess their vulnerability to physical risks and mitigate against consequences that physical impacts of climate change could have on their assets and operations.

Vigeo Eiris' has also developed specific products, such as our **Carbon Footprint and Energy Transition** product that captures companies' impact on climate change through their absolute carbon footprint and their ability to manage risks and opportunities related to climate change.

Additionally, Vigeo Eiris' **Controversial Activities** product collects data on oil and gas companies' involvement in oil sands extraction and production, and the level of their involvement depending on the proportion of revenue derived from this activity.

Lastly, climate change related controversies faced by companies and their ability to mitigate the associated risks are addressed by the **Vigeo Eiris Controversy Database.**

Author:

Svetlana Smith

Senior ESG Research Analyst

This study was witten under the direction of:

Fouad Benseddik

Director of Methods and Institutional Relations

Valérie Demeure

Head of Thematic Research

Hasan CERHOZI

Specialised Carbon Researcher

Environment Thematic Group Manager

For more information:

Press contact: Anita Legrand - anita.legrand@vigeo.com / +33 1 55 82 32 44

General information: Amélie Nun - amelie.nun@vigeo.com / + 33 1 55 82 32 77

Rating

Enterprise

Vigeo Eiris is a global provider of environmental, social and governance (ESG) research to investors and public and private corporates. The agency evaluates the level of integration of sustainability factors in the strategy and the operations of organizations and undertakes a risk assessment to assist investors and companies in decision-making.

Vigeo Eiris offers two types of services through separate business units:

- **Vigeo Eiris rating** offers databases, sector-based analyses, ratings, benchmarks and portfolio screening, to serve all ethical and responsible investment strategies.
- **Vigeo Eiris enterprise** assesses organizations of all sizes, listed and not listed companies in order to support them in the integration of ESG criteria into their business functions and strategic operations.

Vigeo Eiris methodologies and rating services adhere to the strictest quality standards and have been certified to the independent ARISTA® standard. Vigeo Eiris is CBI (Climate Bond Initiative) Verifier.

Vigeo Eiris is represented in Paris, London, Boston, Brussels, Casablanca, Hong Kong, Milan, Montreal, Rabat, Santiago, Stockholm and Tokyo. The team is composed of more than 200 experts of 28 nationalities with diversified and complementary skills. Vigeo Eiris has developed the "Vigeo Eiris Global Network" made of 6 research providers (Australia, Brazil, Germany, Japan, Spain and Mexico).

For more information: www.vigeo-eiris.com