Environmental & Climate risks: assessing the credit impact

S&P Global Ratings looks how the challenges brought about by climate change can impact credit ratings, and the background to the assessment process.

By Jessica **Williams**

With acute weather events making the news more frequently, and the impact of climate change high on the international agenda, lenders and institutional investors are naturally keen to understand how changing environmental and climate (E&C) related risks affect credit ratings.

Notably, there are opportunities as well as risks. Companies successfully managing the transition to a low-carbon economy and mitigating or adapting to the effects of climate change can benefit from changes in the market.

The Methodology

E&C-related risks and opportunities play an important part in modern credit ratings analysis. At S&P Global Ratings, several factors determine a credit rating for any given corporate entity; environmental and social risks can affect these factors, meaning that E&C risks can influence an issuer's credit rating if the risk is material.

E&C risks generally have the most impact on the Business Risk Profile of a company. However they can also be assessed as part of the company's management and governance, which is considered as a modifier (see Chart 1).

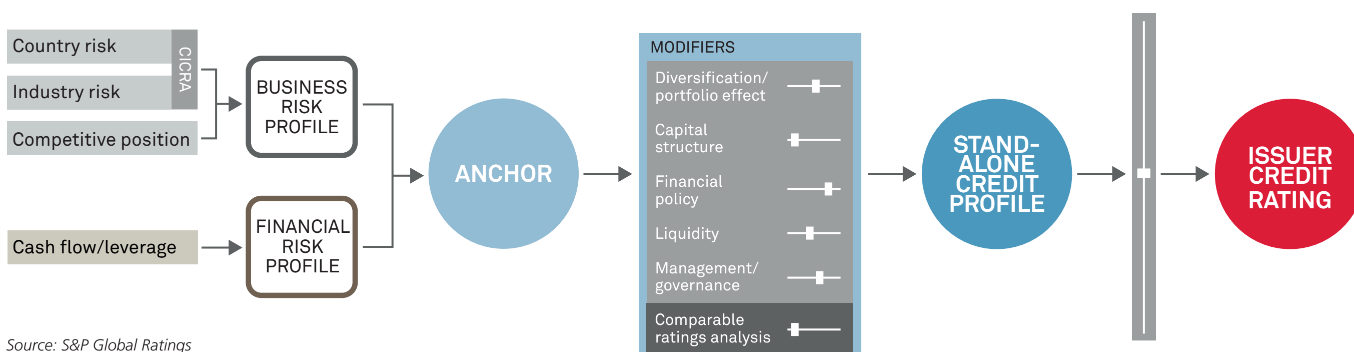
Environmental & Climate risks generally have the most impact on the Business Risk Profile of a company.

This is important because the management and governance modifier accounts for another way that environmental and social risks can factor into ratings, and it represents an area of our criteria where environmental and social risks are directly referenced.

In conjunction with our corporate criteria framework we also apply industry-specific criteria, which we refer to as key credit factors (KCFs), to complement our corporate methodology. The KCFs in rare circumstances may supersede certain sections of our broader corporate methodology. The KCFs provide complementary detail, such as how any industry-specific risk factors are assessed, and are where E&C risk references predominantly appear. That usually happens within the industry risk and competitive position portions of the business risk profile assessment.

In assessing all forms of E&C risk, the methodology accounts for the impact of weather, natural disasters, and emissions regulations on companies' financial and business risk profiles. >

Chart 1: Corporate criteria framework



Source: S&P Global Ratings

As climate change continues, the E&C element of rating global corporate credit is becoming increasingly prominent. In a report published in November 2017, *How Environmental and Climate Risks and Opportunities Factor into Global Corporate Ratings – an Update*[1], S&P Global Ratings found that in the two years since its last such report, the number of references to E&C factors in its credit analyses had risen significantly. In the almost 9,000 research updates published from mid-2015 to mid-2017, E&C risk featured a total of 717 times – compared to 299 in the earlier study. An over-100% increase.

Of those 717 cases, 106 cited E&C factors as a specific rationale for a rating 'action', compared to 56 last time. That is to say that an E&C factor contributed to either raising or lowering a credit rating, revising an 'outlook' for likely future performance, or placing a rating on 'CreditWatch' (i.e. being put under special surveillance by S&P Global Ratings' analytical staff).

The Risks

Perhaps it was no surprise that the ratings affected by E&C risks were overwhelmingly concentrated on issuers in the oil, gas and power industries, where environmental regulations and weather events tend to have a more direct and physical impact on credit quality. As Chart 2. shows, these were however by no means the only sectors feeling the impact. Given that material, unmanaged environmental risks can harm creditworthiness over the long term, E&C concerns represent an important consideration for most industries and companies, which must protect their incomes, cashflows, balance sheets and reputation from a diverse set of risks.

These range from the physical impact of long-term shifts in climate patterns on supply chains, transport needs and employee safety, to the shorter-term damage wrought by event-driven risks such as cyclones, hurricanes or floods. As an example, S&P Global Ratings lowered the rating on project finance company Aberdeen Roads from "A-" to "BBB+" in February 2016 to account for the persistent construction delays resulting from severe flooding in Scotland.

Furthermore, companies must account for the risk of ineffectually transitioning to a low-carbon economy. As a result, they could suffer from the effects of regulatory policy actions and legislation, or even litigation designed to constrain or promote adaptation to climate change – along with possible reputational risk within the market. A notable example was Volkswagen, which in October 2015 was downgraded for deficiencies in its management, governance and general risk management frameworks over the manipulation of its diesel engine exhaust emissions.

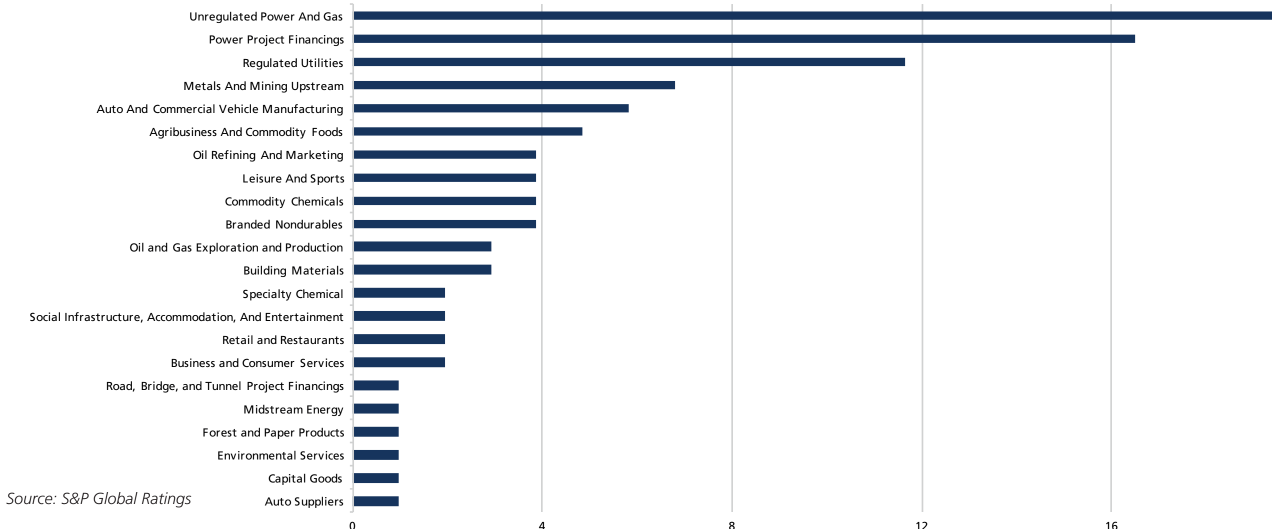
Last but by no means least, companies could find themselves exposed to technological risks by not adapting quickly enough to embrace disruptive new forces such as renewable energy or carbon capture and storage technology. As a result, they may find themselves faced with market risks – on the wrong end of shifts in supply and demand for certain – often renewably sourced – commodities, products and services. This is the rationale on which the downgrade of ExGen Texas Power in January 2016 was based – facing as it did sluggish growth in demand for oil and gas, and greater-than-expected renewable energy generation that weakened market power rates.

Companies could find themselves exposed to technological risks by not adapting quickly enough to embrace disruptive new forces such as renewable energy or carbon capture and storage technology.

A Positive Trend

But with risk comes opportunity. For example, a second major finding of the review was that there have been mounting records of positive rating actions influenced by E&C

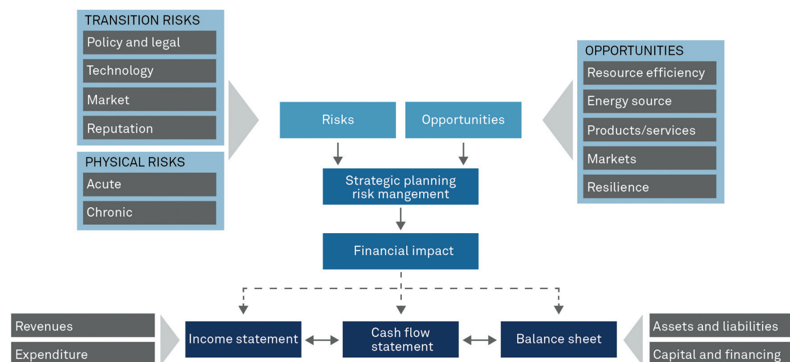
Chart 2: Rating actions related to E&C risk



Source: S&P Global Ratings

1. *www.glio.org/esg*

Chart 3: Climate-related risks, opportunities and financial impact



Source: TCFD Final Report, June 29, 2017

elements. In the 2017 two-year review, E&C factors did largely feature in negative ratings actions – 56% experienced negative action, but with 44% seeing movement in the positive direction. This is in sharp contrast to the 2015 review, in which 79% resulted in a negative ratings action and only 21% of E&C-driven decisions lead to positive change.

So what accounts for this? It may merely reflect the growth in importance of E&C concerns. But – while we cannot make hard and fast assertions at this stage – the growing proportion of positive rating actions could suggest that companies are more aware, and are therefore getting better at managing and mitigating E&C risks.

Moreover, it could mean that they are increasingly benefitting from opportunities in the global energy transition. As the Financial Stability Board's (FSB) Task Force on Climate-Related Financial Disclosures (TCFD) – a group of industry experts commissioned by the Bank of England – has highlighted, accompanying the E&C risks associated with climate change are opportunities (see Chart 3).

In an environment of growing pressure to conserve resources, those companies making efforts to improve efficiency across their production and distribution processes, buildings, machinery and transportation will likely see improvements to their liquidity and profitability. This can involve making use of innovations in LED lighting, industrial motor technology, energy-efficient building retrofits, electric vehicles and new water and sewage treatments. As such, in March 2017, the rating on the company West China Cement was upgraded to reflect cost-reduction efforts in the form of a waste heat recycling system, among other things.

Notably, those making an effort to innovate and develop low-emission products and services could also see a boon to their reputation – improving their competitive position by capitalizing on shifting consumer and producer preferences. Those companies making best use of the energy transition, in particular, will be those investing in alternative, renewable and low-carbon technology.

Corporate credit ratings could be affected not only by climate change but also by companies' own willingness and readiness to adapt.

S&P Global Ratings, for instance, revised upwards the outlook on energy joint venture Darling Ingredients in October 2016, due to its involvement in biofuels, which were expected to benefit from the expansion of lower carbon fuel standards.

Ultimately, corporate credit ratings could be affected not only by climate change but also by companies' own willingness and readiness to adapt. And, if they can proactively mitigate the risks and seize the opportunities, they may reap future rewards.

Jessica **WILLIAMS**

Jessica Williams is an analyst at S&P Global Ratings Sustainable Finance Group based in London where she works in the Infrastructure practice and contributes to environmental and climate risk research. Her work at S&P Global Ratings currently includes the development and roll-out of a Green Evaluation product that looks at the environmental impact of financings as well as research projects focused on energy transition risk, energy storage, climate policy, ESG risks and the impact of climate & environmental factors on credit ratings.

jessica.williams@spglobal.com