

# Renewable Energy transition: are “Green Finance” and “ESG” good enough? - Part II

## Introduction

Green Finance and ESG investing are the answers of public capital markets to the climate crisis. Oftentimes they are reduced to buzzwords whose actual effectiveness is subject of fierce discussion. However, despite some criticism, these instruments have been incredibly successful in recent times and the appetite of institutional investors seems increasingly strong.

In the past article in this series, we have explored the deep economic and strategic reasons behind the renewable rapid rise. In this installment, we will cut through the veil of financial jargon to reveal what is actually working and what is there to improve in the sustainable finance world.

## Green Finance

Institutional investors which handle trillions and trillions worth of assets around the world tend to invest in stocks for a long-term horizon and they are starting to incorporate more significantly environmental and sustainability factors in their portfolio allocation. Indeed, most of these investors have begun to analyze the actions that firms take to equip themselves to tackle issues related to the Environment, Social and Governance (ESG), as key factors in determining the resilience and risk profile of a company. This dynamic will have a substantial influence on the price of financial assets, as well as the risk and return of investments. Indeed, we can already see a large-scale re-allocation of capital in action, which will only accelerate over the next decades. Reasonable questions remain on how exactly firms are dealing with this new business paradigm and which financial instruments they can exploit to better position themselves in this new world.

## Sustainable Debt

Sustainable debt instruments are one of the tools that businesses may utilize to shift to a climate-neutral and ethical business model while also benefiting from decreased financing costs. Several kinds of labeled financial products have been created during the last decade. With regards to sustainable financing options, a line must be drawn between "green instruments", and "sustainability-linked instruments".

In **Green instruments**, such as green bonds or loans, the proceeds must generally be utilized for specified, qualified projects. They belong to a wider array of Social and Sustainability instruments for which it is the use itself of proceeds that must be restricted to ESG goals. This format was the first to emerge in the early 2010s and has seen an incredible growth especially in the infrastructure segment, where it is easier to clearly meet the ESG parameters and finance a specific project. This direct link with the nature of the investment has, however, proved to be the weak spot of the instrument. Indeed, not having flexibility in its allocation makes it harder for normal corporations to tap into this market consistently, and relegate its use for sporadic projects and specific industries.

**Sustainable-linked securities** (bonds and loans), instead, adopt the opposite approach. The proceeds can be used for general purposes, but it is required from the borrower to set "sustainability performance targets" (SPT's) based

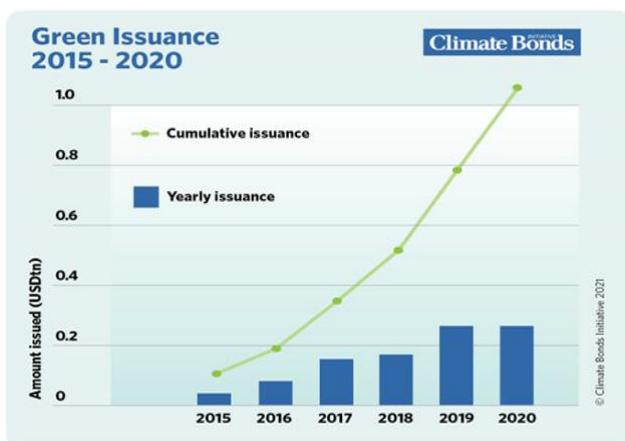
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on objective KPIs. Achieving SPTs is generally associated with a reward and punishment structure, depending on whether or not the objective is attained. The benefit for sustainability-linked bonds might be a reduction in coupon payment. The penalty for failing to reach the objective is a step-up in coupon payment, which means an increase in bond interest. The market for **sustainability-linked loans** has experienced the most growth in recent years. Sustainability-linked loans entered the market for the first time only in 2017, with €5bn issued that year. This number increased to €47bn in 2018. In 2020, issuance increased to €120bn, a more than 250% rise over a couple of years. This unexpected rise in popularity in sustainability-linked loans can be attributed to their ease of use (setting the SPTs) and economic advantage. They are appropriate for borrowers who want to incorporate incentives for meeting sustainability objectives into their financing documents but do not intend to use the loan proceeds for a specific purpose.

**Sustainability-linked bonds**, on the other hand, are not yet as mainstream. The first offering of this kind was back in September 2019 by Enel, an Italian utility company, which after having already gained some experience in Green Bond financing decided to issue a \$1.5bn 2.650% 5-year General Purpose SDG (Sustainable Development Goals)-Linked bond. The issuance was extremely successful, and it was almost three times oversubscribed. However, since then, they have only been issued on a limited basis, with a relatively modest issuance volume (€11bn in 2020) compared to sustainability-linked loans. Sustainability-linked bonds are less practical for medium and smaller-sized businesses than sustainability-linked loans due to minimum size concerns and onerous prospectus requirements for bond offerings. On the other hand, sustainability-linked loans are not limited to the investment grade market. Indeed, as private market and PE investors in the high-yield sector are increasingly incorporating ESG principles into their portfolios, this is the perfect asset class to tap into.

## Future Outlook

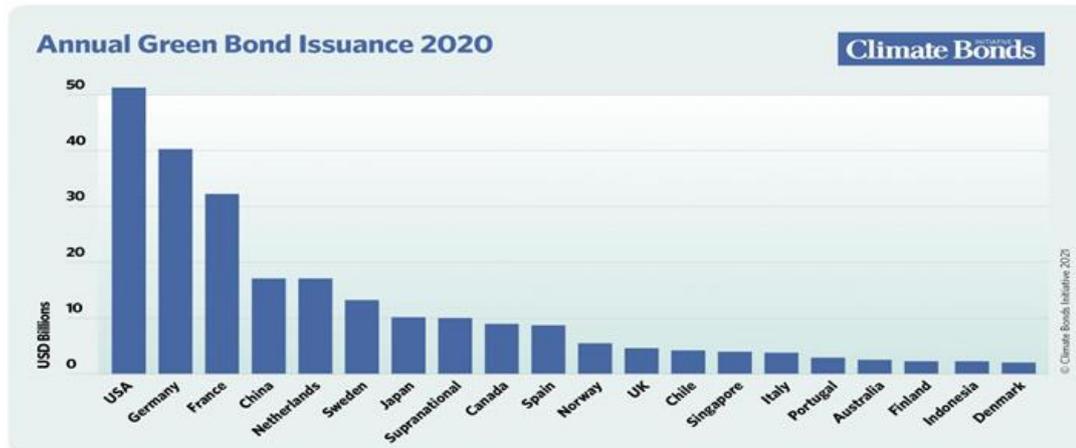
The green debt capital market (ESG and sustainability-linked bonds and loans) had achieved an overall volume of \$104bn at the end of 2015. Five years later, in early December, the market exceeded the cumulative \$1trn record, with the year finishing with a \$1.05trn total, that is, to put in perspective, roughly 1% of total bond markets. The total market size in 2020 shows a 60% annual growth rate from 2015.



Source: [climatebonds.net](https://climatebonds.net)

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In terms of annual green bond issuance in particular, the United States dominated national rankings once again (\$51.1bn), Germany was second (\$40.2bn), and France was third (\$32.1bn), with China fourth (\$17.2bn), and the Netherlands fifth (\$17.0bn). France maintains its yearly podium place in 2017, 2018, and 2019, while Germany emerges in the top three for the first time.



Source: [climatebonds.net](https://climatebonds.net)

With this picture clear in mind and fully aware of the attention that is now paid to ESG topics across the political and economic spectrum, it is inevitable to expect companies in the future to tap these new sources of financing at an ever-increasing rate, making the share of green bond issuance always more preponderant in the context of global debt capital markets. A natural consequence of all this is raising questions on how this new emerging trend of sustainable finance is impacting companies under a cost of capital perspective.

## The ESG world

Investors now understand, more than ever, how Environmental, Social, and Governance (ESG) issues affect long-term risks and prospects in financial markets. Therefore, companies started paying a lot of care to their ESG rating, since this latter has serious implications concerning the scope of investors they can appeal, and for their cost of capital. An **MSCI ESG Rating**, according to the MSCI's own definition, is intended to assess a company's ability to withstand long-term, industry-material environmental, social, and governance (ESG) challenges. They claim to be employing a rules-based methodology to identify industry leaders and laggards based on their exposure to ESG risks and their ability to manage those risks in comparison to peers. These ESG Ratings vary from leader (AAA, AA) to laggard (A, BBB, BB) (B, CCC).

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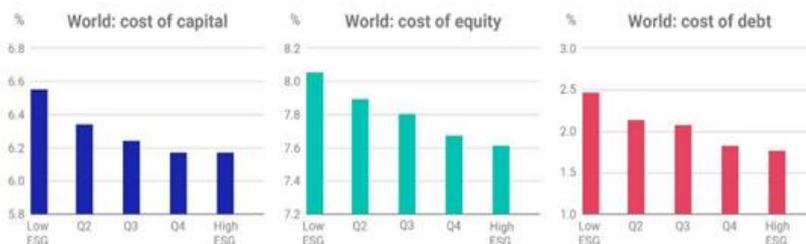


## High-ranked ESG companies benefit from lower cost of capital, and higher valuation

There is a lot of discussion concerning how ESG ratings are affecting the cost of capital of companies, and despite some contrarians who criticize the relative “ease” with which most academics conclude that high-ranked ESG firms enjoy lower cost of capital, there is indeed plenty of empirical research that has proven that this is actually the case.

Drawing conclusions on the **cost of debt** is relatively easy, given the possibility of comparing the stated coupon rates on traded bonds between similar companies with different ESG ratings and looking at the interest rates charged by banks on issued notes. This and many other methodologies were used, for instance, in “*ESG Practices and the Cost of Debt: Evidence from EU Countries*”, a paper by Yasser Eliwa, Loughborough University, Ahmed Aboud, University of Portsmouth, and Ahmed Saleh, University of Coventry. In this work, their findings suggest that firms can benefit from improving their ESG performance and disclosure, which would allow them to have access to a lower cost of capital levied by lending institutions. Altogether, consensus is reached among academics that deem the ESG rating as, now more than ever, a crucial factor in determining the default risk of a company. Therefore, these companies can take advantage of the lower credit spreads.

On the other end of the spectrum, proving the **cost of equity** is lower for “green” companies turns out to be trickier. It is indeed already complicated to calculate the cost of equity on his own, let alone having to calculate it accounting for differences among companies in terms of ESG ratings. Nonetheless, some progress has been made on this front, in fact, there are some empirical studies like the ones conducted in “*Assessing Risk through Environmental, Social and Governance Exposures*” by Dunn et al., 2016, and in different papers written by Giese et al. (2018, 2019), which have showed how many of the firms with high MSCI ESG ratings have lower levels of systematic risk than companies with low ESG ratings. This obviously implies a lower beta and, hence, a lower cost of equity under the CAPM model assumption. The economic explanation is again intuitive: companies with high ESG features were more robust when faced with shifting market conditions, such as financial market volatility and regulatory changes.



Source: MSCI.com

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Concluding, businesses with strong ESG ratings have lower average capital expenses than companies with low ESG scores granting them higher valuations in the capital markets. No definitive conclusion can yet be drawn concerning the existence or not of an ESG premium paid for companies with a good rating. However, it is inevitable to notice the acquisition prices that, nowadays, are being paid both by financial and strategic acquirers for “green” companies or, at least, for those appearing “green”, are skyrocketing.

However, a final remark must be made: ESG ratings are wildly inconsistent among different data providers and no common definition has been found for the industry. This is a major point of criticism to the system, because it sheds some doubt on the reliability of studies and their screening processes. Indeed, this appears to be one of the most important challenges for the industry going forward and a standardization of best practices is needed to give credibility to this up-and-coming sector.

### **The Impact on M&A in the energy sector**

ESG is now as much about risk management as it is about social activism or attempting to change the world. When Corporate Social Responsibility (CSR) is factored into M&A calculations, the value produced for the bidder increases. The idea is that by focusing on environmentally friendly businesses, a bidder may lower the firm's risk and improve its public image. In practice, acquirers appear to assess the targets' CSR level and environmental management equally as carefully as the rest of the relevant due diligence components throughout the purchase process.

This additional risk factor has caused significant changes in the M&A market at large, but the Oil & Gas sector has seen the most dramatic transformation. In 2010, the oil and gas industry in the US was the largest single component of the S&P, but it then began to decrease in terms of its relative footprint. Fossil fuel firms were so strong that most of them thought they could ignore environmentalists' objections and demonstrations. Not only have the share values of the major fossil fuel corporations plummeted by half, but they are also being forced to shed assets and restructure. Indeed, all major Oil & Gas players are being pushed by investors to make commitments to reduce their operations, embrace renewables, and demonstrate to the world that they can be green.

The liquidity constraint brought on by the pandemic is putting pressure on companies to sell assets. Major corporations have been compelled to slash dividends, cut capital investment substantially, and increase debt. When their stock prices plummeted last year, they refocused their efforts on simplifying operations and cutting expenses. As pressure mounts on them to address climate change, these corporations want to preserve the assets that are most profitable and, ideally, least polluting.

The emerging trends are complex and multifaceted, but can roughly be categorized as:

1. Incumbents break-up to shed polluting assets and restructure to focus on renewables
2. Merger of incumbents players to cut costs and invest more heavily in renewables
3. Direct acquisitions of renewable assets by incumbents
4. A contrarian trend of private and national Oil corporations to buy undervalued oil assets

In the next section we will present a few of the most relevant recent deals in each category.

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## **Power & renewables Deals in 2021**

There were 63 agreements in the power and renewables industry in H1 2021, totaling \$16.9bn. This translates to a 169% rise in deal value over H1 2020 and a 15% increase in volume over the same period.

### **Elliott Management pushing for breakup of SSE**

Activist hedge fund Elliott Management is aiming to split up SSE PLC (LSE:SSE) after amassing a stake in the power firm. According to Bloomberg, the hedge fund founded by billionaire Paul Singer believes there is potential in separating SSE's renewable portfolio from its regulated energy and non-renewable operations. Elliott Management, which has over \$40bn in assets under management, is known for being aggressive in imposing reforms on its portfolio businesses. The firm has previously followed a similar strategy with EDP-Energias de Portugal SA, pressuring the company to sell a share in its Iberian power distribution business and unload a Brazilian operation to reinvest the revenues in renewable energy. EDP's public renewables arm has more than quadrupled in value over the last four years, and it now outperforms its parent firm.

This potential deal is an example of how “green assets” might be boosted in value if carved-off from an incumbent conglomerate.

### **Avangrid and PNM Resources to combine in a strategic merger transaction**

Avangrid Inc (AGR.N), a U.S. power company is in discussions to acquire PNM Resources Inc (PNM.N), a competitor active in New Mexico and Texas with a market capitalization of more than \$6bn, including debt. Avangrid's operations would be expanded beyond its current presence in the United States as a result of the transaction. Given Avangrid's sizable renewable energy portfolio, it would also hasten PNM's shift to sustainable energy. PNM may benefit from Avangrid's clean energy expertise as it implements a strategy announced in July to phase out coal from its power generating mix by 2031 and attain emissions-free electricity by 2040.

### **Duke Energy closes the first part of \$2.05bn sale of stake in Indiana utility**

On September 10th, 2021, Duke Energy Corp (NYSE: DUK) completed the sale of an 11% minority stake in its Indiana entity to the Singapore sovereign wealth fund GIC Pvt Ltd for cash proceeds of \$1m. The transaction outlines the first phase of GIC's minority stake in Duke Energy Indiana (DEI), which will ultimately bring to the Fund a 19.9% stake in the company for a total purchase price of \$2.05bn. The second closure should take place in January 2023. Proceeds from the transaction will fund Duke Energy's \$60bn capital plan, a five-year incentive that will accelerate the transition to clean energy and reallocate capital to support further growth investments within its portfolio of regulated public services.

### **SK Group Invests \$1.5bn In Plug Power**

SK Group, a South Korean conglomerate, will buy a 9.9% interest in hydrogen fuel cell producer Plug Power Inc for \$1.5bn and create a joint venture to assist bring hydrogen fuel cell products to Asian markets, according to the firms. A unit of SK Group in the United States will buy roughly \$51.4m shares of Plug Power, located in Latham, New York, for \$29.3 per share as part of the agreement. In extended trading on Wednesday, Plug Power shares

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were up 20% after ending 7% higher. The deal comes at a time when sustainable energy is in high demand, indicating a trend of transition from polluting fossil fuels to renewables.

### ***A contrarian view: value in non-renewable assets***

As a result of the trends discussed above, fossil fuel dependent companies have been laying out plans compatible with a more environmentally friendly business model. Chevron (NYSE:CVX) pledged to triple its investment in low-carbon sources as well as carbon capture technologies in the next seven years, while ExxonMobil (NYSE:XOM) set their goal at reducing greenhouse gas emissions by 30% in its oil and gas production businesses by 2025. 35 of some of the biggest companies in the world, including European energy heavyweights such as Shell, BP and Equinor created the C2ES (Center for Climate and Energy Solutions) Business Environmental Leadership Council, setting ambitious goals of net zero emissions no later than 2050.

Although this news gives the impression that the movement is succeeding, upon closer examination, this does not turn out to be necessarily the case. Firstly, although “big oil”, publicly traded big energy companies, garner significant media attention, they account for just 12% of oil and gas reserves, 15% of production and 10% of estimated emissions from industry operations according to the International Energy Agency. The rest of the sector is dominated by national oil companies, who do not demonstrate a comparable interest in going green. For example, the Saudi oil monopoly Aramco, world’s largest oil company by revenue, is set to increase its oil production to 13m barrels a day from 12, as announced by the kingdom’s energy minister. Brazil’s Petrobras and Russia’s Gazprom flat-out refuse to set corporate emissions targets. Only notable exceptions are Petrochina and Petronas of Malaysia, who aim for net zero by 2050.

Fulfilling these promises usually doesn't mean that the public companies are necessarily becoming more green. Indeed, the easiest option to meet the requirements is to divest, selling the most carbon intensive assets. Some of these are also considered “stranded” assets, potentially profitable oil and gas fields that will not be developed in order to meet the pledges. The combined value of fossil fuel assets up for sale across the industry is more than \$140bn, according to Wood Mackenzie, an energy consultancy. ExxonMobil, Chevron, BP, Royal Dutch Shell, Total and Eni have sold a total of \$28.1bn in assets since 2018. The buyers for these assets are usually less well-known private companies, backed by private equity groups that are opaquer in their business dealings. Additionally, the divergence of fossil fuel production into numerous unrecognized firms is making it harder for activists to find targets with ESG purposes. Still, some of these assets are safe investments with high returns, and if they remain so, they will attract sizable investments. According to a report by Fitch Ratings, investments into wind and solar, at approximately \$40bn, were less than one-third with respect to the total PE investment into fossil fuel assets, standing at more than \$150bn. The North Sea production has seen a strong flow of private capital. ExxonMobil sold assets worth \$1.3bn, consisting of 14 fields, to Norwegian PE group HitecVision in February 2021, while Conocophillips stroke a \$2.7bn deal with Chrysaor, a PE-backed energy company. The largest deal, however, is still Shell’s \$3.8bn sale, again to Chrysaor, in January 2017. Some energy sector analysts believe that the pressure on big oil does little in the way of reducing total carbon emissions, backed up by a study published by the Journal of Economic Geography analyzing the capital inflow to the sector, which indicates that as more stringent environmental policies are enacted, investments just get directed to “pollution havens”, states that continue to subsidize fossil fuels.

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Asset sales play another key role in the ecosystem. As big oil invests heavily in renewable technologies, oil assets disposals have proven to be a major source of funding during the oil price crash and consequent liquidity problems. Green assets like wind and solar, while attractive, are not cheap and are getting more expensive by the day. This dynamic depresses the prices for non-renewable energy assets even more, while increasing renewable assets prices even further. It is clear that there exists an opportunity for yield-hungry private funds to purchase oil assets de facto operating under a disclosure regulatory arbitrage. The risk is of course in 5 years' time not being able to successfully exit the investment, but as IPOs are less and less popular as an exit option and there is still a vibrant ecosystem of privately owned oil players, it does not seem an unbearable risk.

In final analysis, it is evident that green finance and ESG investing alone are not enough to tackle the environmental emergency without unintended consequences. It is therefore necessary for authorities to first of all propose an homogeneous set of parameters for ESG screening, but even more importantly, a solution that can extend this trend to private markets seems of paramount importance.

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