Corporate Bonds for Energy Companies Show Climate Premium

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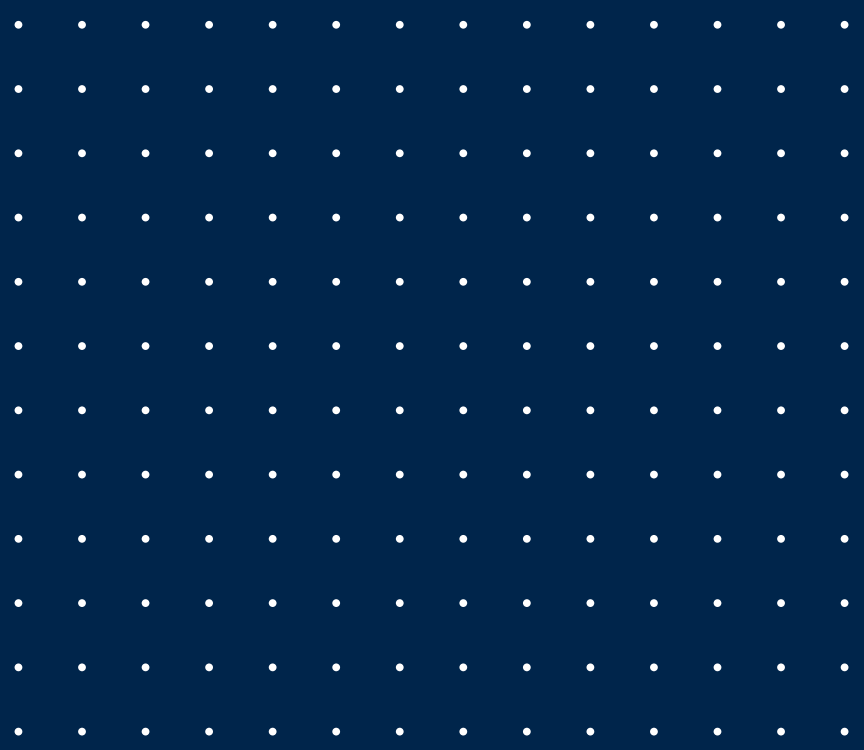


As the urgency of the climate crisis has become more apparent to the finance community, much attention has been paid to the role that equity holders, bank financing, and specialty investment products play in determining the cost of capital for energy assets. Organizations like Climate Action 100+ have been using equity positions to pressure fossil fuel companies to reduce emissions, improve climate governance, and enhance disclosure around climate issues. Consumers, investors, and regulators have pressured banks, which provide most of the debt financing to energy assets, to cease lending to develop coal facilities, arctic oilfields, and other particularly carbon-intensive and environmentally sensitive assets; banks increasingly have charged higher loan spreads for more climate-damaging assets. And demand for green bonds finance climate solutions from fixed-income investors continues to outpace supply.

A climate premium also exists in the corporate bond market, with bonds for greener firms trading at higher prices and lower yields while bonds for less green firms trade at lower prices and higher yields. BRG professionals have found that among major US power generation owners, browner companies had 0.7 percent to 1.5 percent higher bond yields than greener companies from 2017 to 2020, adjusted for bond duration and credit rating.[1, 2] Similarly, bond yields for non-supermajor oil and gas upstream companies (excluding the power companies above) were 1.4 percent to 2.3 percent higher than they were for renewable companies from 2017 to 2020, though the effect was notably smaller for supermajors.[3, 4] While receiving less media attention than investor activism and pledges by banks to cease financing fossil assets, the corporate bond market also increasingly appears to be diverting capital toward companies more aligned with the energy transition through a lower cost of capital. This is significant, as the corporate bond market remains a major source of debt financing for energy facilities (the OECD estimates that from 2009 to 2019, USD$167 billion corporate bonds were issued by energy companies in advanced economies and a further USD$78 billion were issued in emerging economies), though for now most of that funding still goes toward traditional companies.[5]

1 Yield after adjusting for equivalent-duration treasury yields and the credit default spread associated with a company's S&P credit rating.

2 BRG analysis using S&P Capital IQ data.

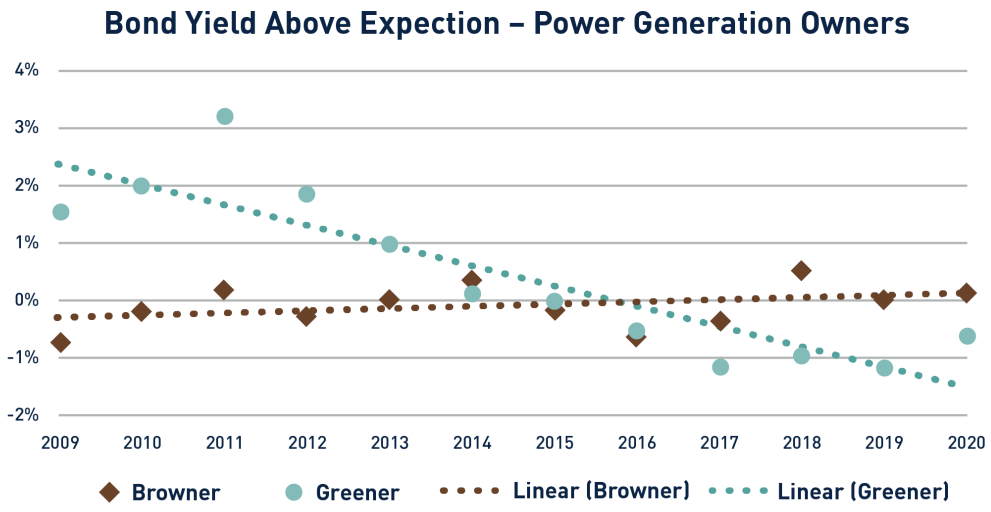
3 Supermajors defined as BP, Chevron, ExxonMobil, Shell, and Total.

4 BRG analysis using S&P Capital IQ data.

5 S. Çelik, G. Demirtaş, and M. Isaksson, *Corporate Bond Markets in a Time of Unconventional Monetary Policy*, OECD Capital Market Series, Paris (2019), available at: www.oecd.org/corporate/Corporate-Bond-Markets-in-a-Time-of-Unconventional-Monetary-Policy.htm

Figure 1 shows the bond yield above expectations[6] for the largest US power generation owners. Greener companies are defined for this analysis as the top ten renewable power generation owners,[7] while browner companies are defined as the top ten coal or top ten natural gas power generation owners. For companies on multiple lists, the highest rating was used, and companies with a tied ranking were excluded.[8]

FIGURE 1. BOND YIELD ABOVE EXPECTION FOR POWER GENERATION OWNERS



Source: S&P Capital IQ Data, BRG analysis

Since 2015, the greener firms among the largest US generation owners have seen a significantly lower cost of debt for their corporate bonds than would be expected based on credit rating and duration alone, while financing costs for the browner firms have been flat to increasing after adjusting for interest rates, duration, and credit rating.[9] This trend mirrors what the Oxford Sustainable Finance Program recently found in the bank loan sector for power assets.[10]

The trend is also stark when comparing oil and gas producers to companies in the renewable supply chain. Figure 2 shows the same comparison for renewable companies (developers, equipment companies, and asset owners, excluding those in Figure 1), supermajors, and other upstream oil and gas companies. While yields have been trending down slightly for upstream companies after adjusting for interest rates and default risk, the gap between renewable and non-supermajor upstream companies has been increasing. Interestingly, supermajors have also seen declining borrowing costs adjusting for credit rating and interest rates. This could reflect a flight for debt investors to higher-rated or less-leveraged companies, the cash-flow hedge provided by the downstream and chemicals segments of these companies, an aversion to the unconventional assets more predominant among non-major exploration and production (E&P) companies, or a belief that supermajors are otherwise more resilient to climate risk than other major oil and gas producers.

6 Yield after adjusting for equivalent-duration treasury yields and the credit default spread associated with a company's S&P credit rating.

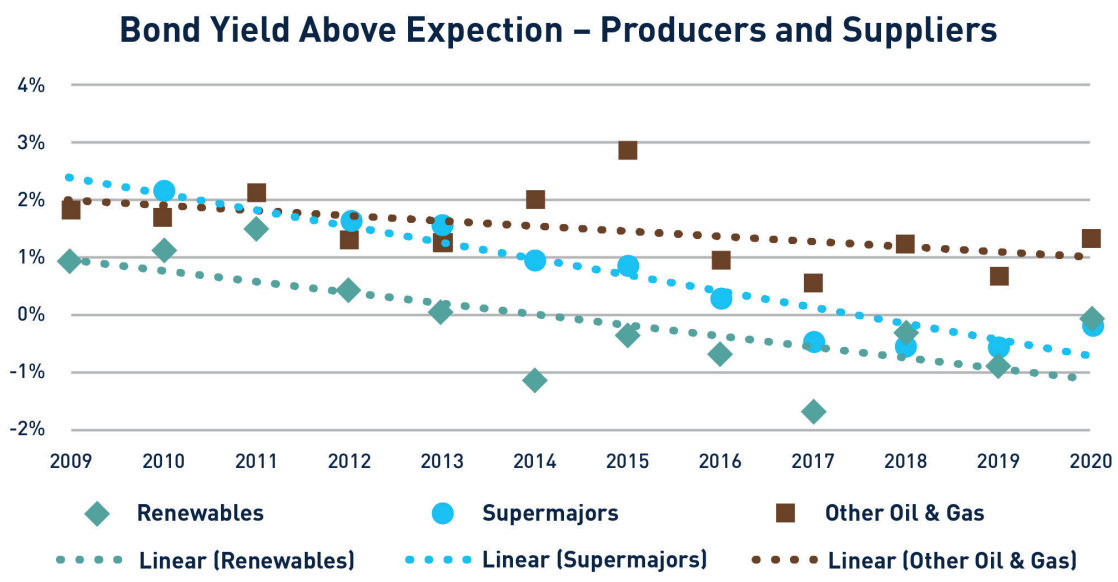
7 As defined by S&P Global Market intelligence on December 24, 2020.

8 Greener companies under this definition are NextEra Energy, Berkshire Hathaway Energy, Iberdrola, Enel, EDP, NextEra Energy Partners, and Brookfield Renewable Partners, while browner companies are Duke Energy, American Electric Power, Vistra Corp., Calpine, NRG Energy, Entergy, Tennessee Valley Authority, Xcel Energy, Dominion Energy, DTE Energy, and Evergy. Southern Company is excluded because it is the fourth-largest owner of both renewable and coal generators, while LS Power is excluded because it is unrated by S&P.

9 Higher costs for greener companies prior to 2015 are likely due to the exposure of Iberdrola, Enel, and EDP to southern Europe during the sovereign debt crisis in that region in the early 2010s. The disparity is not notable for the US-based greener companies.

10 Xiaoyan Zhou, Christian Wilson, and Ben Caldecott, *The energy transition and changing financing costs*, Oxford Sustainable Finance Programme (April 2021), available at: https://www.smithschool.ox.ac.uk/research/sustainable-finance/publications/The-energy-transition-and-changing-financing-costs.pdf

FIGURE 2. BOND YIELD ABOVE EXPECTION FOR RENEWABLE AND OIL AND GAS FIRMS



Source: S&P Capital IQ Data, BRG analysis

The existence of a climate premium in the corporate bond market is not surprising. The data mirrors what can be seen in bank loans, and demand for green bonds is high (and they are routinely oversubscribed as result).[11] But it has important implications for both fixed-income investors and the future of energy project development. For investors, more climate-aligned corporate bonds can be an important part of mitigating climate risk in their portfolios, which can be challenging to do, and the existence of this premium creates tradeoffs between returns and climate risk.

This also has key implications for the future of energy project investment. Cost of capital is second only to capital cost (capex) as a leading driver of project economics and competitiveness for energy assets. This is particularly true in the renewables sector, which has proportionately higher capital costs and proportionately lower operating costs than fossil fuel assets. The availability of cheaper capital for greener companies, due to lower bond yields than for browner companies alongside lower bank loan spreads and low interest rates, has the potential to reinforce declining renewable energy costs through more rapid investment and stimulate economies of scale and further technology cost reductions. This could exacerbate the market challenges seen by marginal fossil projects while creating a virtuous cycle for greener assets that helps accelerate the energy transition.[12]

11 Jennifer Laidlaw and Mohammad Taqi, "Green bonds suffer setback amid market rout but long-term demand to stay strong," S&P Global (April 21, 2020), available at: https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/green-bonds-suffer-setback-amid-market-rout-but-long-term-demand-to-stay-strong-57982898

12 For further exploration of this topic, please see Chris Goncalves, Matt Tanner, Alayna Tria, and Tristan Van Kote, "From Resource Scarcity to Energy Abundance and Infinite Supply," *Transition Economist* (January 2021), available at: https://pemedianetwork.com/media/10251/brg-whitepaper-jan-2021.pdf

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