MOODY'S

OUTLOOK

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TABLE OF CONTENTS

Recovery from COVID-19 pandemic will increase focus on social and environmental challenges 2
Energy and emissions targets in the US, EU and China will converge again 4
Financial system facing new landscape of transparency requirements 5
Corporate governance initiatives to increase board diversity 7
Moody's related publications 8

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2021 outlook – Stimulus, transparency and policy alignment to amplify ESG trends

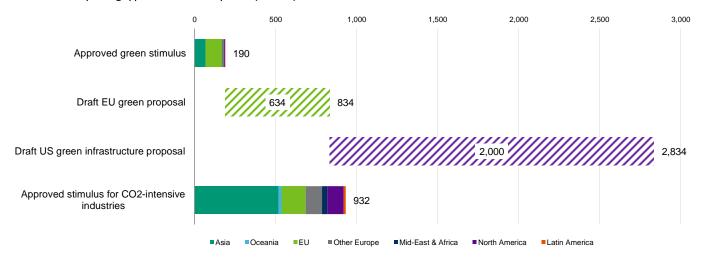
As the global economy recovers from the coronavirus pandemic, environmental, social and governance issues will assume greater importance in the actions of policymakers, regulators, investors and corporate decisionmakers. The increasing interaction of these issues will amplify their impact on credit quality, while the positive credit implications of being well-positioned to adapt to ESG trends will become more apparent.

- » Recovery from COVID-19 pandemic will increase focus on social and environmental challenges. Major economies will attempt to integrate their economic recovery and job creation initiatives with longer-term efforts to reduce carbon emissions. Green stimulus packages are attaching environmental conditions to bailouts or focusing on the development of low-carbon services and technologies, like electrified transport. Effectiveness of government policies aimed at supporting jobs and incomes, and new sectors emerging after the pandemic will shape sovereigns' credit profiles.
- Energy and emissions targets in the US, EU and China will converge again. The EU recently upped its 2030 greenhouse gas emissions reduction target (from 1990 levels) to 55%, from 40% previously. US President Joe Biden's plan indicates a 2025 target to be put to Congress this year as a first step to a net-zero 2050 target and decarbonising the US power sector by 2035. A raft of Biden executive orders has already started aligning the US with international climate objectives. China ratcheted up its 2030 commitments in its revised Nationally Determined Contributions at the end of 2020 under the Paris Agreement. This alignment of the major economic blocs on decarbonisation will further sharpen the credit implications of the energy transition.
- » Financial system facing new landscape of transparency requirements. Greater transparency around material ESG issues will increasingly affect access to capital and asset values in high-risk sectors. A growing landscape of sustainability standards and disclosure requirements through the financial and corporate systems will expose financial flows to greater scrutiny and oversight. We expect this to start having greater influence on investment decisions at all levels, from banks to asset managers to consumers.
- » Corporate governance initiatives to increase board diversity. We expect board diversity initiatives to start driving higher turnover on corporate boards. California's expansion of board diversity requirements beyond gender-related mandates offers insight into what may emerge on a broader scale in Western capital markets. Management of sustainability issues will also be in the spotlight as the EU prepares to introduce sustainable corporate governance requirements.

Recovery from COVID-19 pandemic will increase focus on social and environmental challenges

We expect 2021 to be the year of green stimulus as major economies attempt to integrate their economic recovery and job creation initiatives with their longer-term efforts to reduce carbon emissions. The results of the US election and subsequent runoffs in the state of Georgia facilitate the Biden administration's ability to pass major infrastructure and recovery packages (see New administration's swift policy pivot on health, economy and climate will affect energy and consumer-related sectors). Climate change and jobs were consistent campaign themes for Biden and his initial executive orders demonstrate the White House's return to supporting green infrastructure and halting hydrocarbon-based activities. The European Union is also rolling out a green stimulus package, in parallel with national programs (see EU recovery plan will benefit tech, telecom, clean transport and green energy sectors). We expect more such announcements later in the year given the increased ambition of the EU and the need to stimulate flows of capital into green infrastructure if targets are to be met.

Exhibit 1
Economic recovery and job creation initiatives are being linked with efforts to reduce carbon emissions
Green stimulus spending approved or near completion (\$ billion) as of 11 December 2020



Details of the Biden administration green stimulus are not yet confirmed. Source: BloomberqNEF

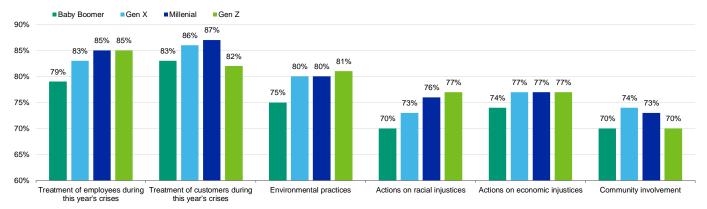
Green stimulus packages are aimed at supporting the development of new low-carbon products and services, such as electrified transport, technologies that enhance energy efficiency, renewable energy generation and green hydrogen. The Biden administration is also planning a \$2 trillion "Build Back Better Recovery Plan", which is expected to have a green infrastructure focus. As reflected in Exhibit 1, emerging markets do not have the capacity to implement large stimulus packages. The bulk of stimulus to date has been rescue packages for existing CO2-intensive industries to ensure their viability, with around half focused on transport, including aviation. In some cases, bailouts include environmental conditions. France's aid package for Air France requires the national carrier to slash carbon emissions by updating its fleet with more fuel-efficient planes and discontinuing domestic routes that can be covered by train services.

The pandemic has also worsened income inequality, which can increase social risk, particularly for public-sector issuers. Many governments provided households with one-off or time-limited payments during the course of the pandemic, with payments likely continuing beyond the originally envisaged time frame. However, the pandemic will leave most governments with weakening financial strength, leading to challenging policy choices about what social policies to phase out and when. Public sector finances will remain under pressure if government revenues fail to return to pre-pandemic levels.

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The COVID-19 pandemic will intensify the focus on institutional approaches to ESG issues in 2021, including the degree to which issuers are able to avoid or mitigate harm to public health and social welfare. The ability of companies to deploy technology and continue to engage with customers is critical for many sectors. Companies that failed to protect employees during the pandemic may see knock-on effects in 2021 in terms of reputation, recruitment and consumer choice. The fourth edition of salesforce.com inc.'s (A2 stable) State of the Connected Customer survey found that 56% of business and individual consumers had reevaluated the societal role of companies in 2020. Following this reevaluation, the survey found that treatment of employees and customers during the year's crises is the most significant influence on purchasing decisions across all age groups. Younger cohorts tend to have slightly higher emphasis on all the environmental and social issues considered.

Exhibit 2
Consumers are considering company treatment of employees and customers in their purchasing decisions
Percentage of consumers who say the following influence their decisions to buy from a company by age group



Source: Salesforce State of the Connected Consumer 2020

The treatment of employees during the pandemic has provided a test of the value that issuers place on human capital. This can be seen in directly exposed sectors, such as the meatpacking industry, where plants became coronavirus hot spots. Even in office-based sectors, support and equipment provided to employees working remotely and management of the mental health effects of greater isolation are important for maintaining employee productivity and morale. The eventual return to the workplace will also present managerial challenges, such as determining whether employers have the ability to require employees to be vaccinated. Employee safety and well-being will be more important than they were before the pandemic, with both positive (labour relations, social responsibility) and negative (higher costs, reduced production capacity) implications. Some investors are likely to increase their scrutiny of company responses to the pandemic, with decisions about the future of workforces, healthcare coverage and the ability to adapt to challenging business conditions providing insight into management quality. Over time, we expect such scrutiny to impact capital allocation decisions by investors.

The continued waves of coronavirus infections in some regions continue to constrain economic activity, forcing some companies to adjust dividend policy, capital spending or other financial strategy options (for example, see Some companies act on dividends to mitigate coronavirus fallout). For the energy sector, the pandemic has been a test of low-carbon capital expenditure commitments, with green investments proving to be more resilient than capital spending in traditional areas, such as exploration and production.

Shareholder engagement on climate change, such as through shareholder resolutions and initiatives like Climate Action 100+, will also remain a major issue in 2021, with the investor focus advancing beyond climate-related disclosures to capital spending and strategy. If pandemic restrictions continue to curtail economic activity during 2021, oil demand will remain under pressure and changes in consumer behaviour will solidify, accelerating the energy transition. This makes diversification into low-carbon options credit positive for utilities and energy companies.

Energy and emissions targets in the US, EU and China will converge again

The EU recently upped its 2030 greenhouse gas emissions reduction target (from 1990 levels) to 55%, from 40% previously. The Biden administration plan indicates a 2025 target to be put to Congress this year as a first step to a net-zero 2050 target. A further interim step is a carbon-pollution free electricity sector by 2035, which would require reductions in gas-fired generation, not just thermal coal, which is already in decline. The development of natural gas infrastructure is facing more challenges as emissions targets tighten (see Shifting environmental agendas raise long-term credit risk for natural gas investments). Further announcements and initiatives from governments, companies and financial institutions are expected leading up to November's delayed COP26 global climate summit.

China ratcheted up its 2030 commitments in its revised Nationally Determined Contributions at the end of 2020 under the Paris Agreement. The new targets are:

- » Cut CO2 intensity of GDP by more than 65% from 2005 levels compared to the earlier target of 60%-65%.
- » Reach a non-fossil fuel (renewables and nuclear energy) share of 25% in primary energy compared to the earlier target of 20%.
- » Increase forest stock by 6 billion cubic meters from 2005 compared to the earlier target of 4.5 billion cubic meters.
- » Raise combined wind and solar power capacity to 1,200 GW up from the installed capacity of 415 GW at the end of 2019.

Given the scale of the Chinese energy system and its global significance for emissions, even relatively small shifts in targeted reductions can have major implications. For example, if the CO2 intensity of GDP declines by 65% from 2005 levels by 2030, this would still allow for increases in absolute emissions levels, assuming continued GDP growth. The target would have to be close to 70% to result in China's CO2 emissions peaking by 2030. While the renewables capacity targets are sizeable, wind and solar deployment could exceed them in order to achieve the goal of relying on non-fossil fuel sources to meet 25% of China's primary energy needs.

To meet forthcoming light vehicle emissions/fuel economy standards, auto manufacturers will have to increase the proportion of electric vehicles in their fleets. This may be credit negative for some automakers that have not developed cost-effective production of electrified vehicles, or who currently rely on more polluting models. The newly completed merger of Fiat Chrysler Automobiles N.V. and Peugeot S.A. to form <u>Stellantis N.V.</u> (Baa3 stable) was motivated in part by Peugeot's more robust offerings of electrified vehicles (see <u>FAQ on the credit implications of the Stellantis merger</u>).

The Biden administration has indicated that it will seek to restore the 2025 US corporate average fuel economy (CAFE) standards previously sought by the Obama administration, of 54.5 miles per gallon (mpg) for light vehicles. Meanwhile, the EU target for automakers to reduce fleetwide emissions for new light vehicles to an average of 95 grams of carbon dioxide per kilometer – equivalent to 57.4 mpg and down from the previous limit of 130 g CO2/km – becomes fully effective in 2021; by 2025, fleetwide emissions will have to be reduced by an additional 15%. China will require fleet fuel economy standards of four liters per 100 kilometers in 2025, equivalent to 58.8 mpg. Increased sales of electric vehicles are essential for compliance with these regional targets.

Energy and climate policies will also see more alignment, with the EU, the US and China all recommitting to climate objectives. The idea of carbon border adjustment mechanisms is also being mooted by the EU and the Biden administration, to reduce carbon leakage, (i.e., the transfer of emissions by shifting production and therefore emissions overseas). Such mechanisms would put carbon emissions firmly on the trade agenda of major economies and may create further tensions over imports and exports.

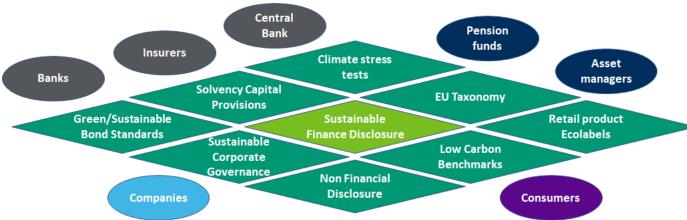
The pandemic also highlighted income inequality, which presents a growing challenge for many sovereigns, (see <u>Pandemic shock will spur income inequality, with credit risks for fiscally weak sovereigns</u>. A greater focus on environmental justice was included in the new US administration's platform. This recognises that a number of ESG issues, such as climate change, pollution or health impacts, tend to affect low income, and non-white communities more.

A renewed mandate for the US Environmental Protection Agency to develop and enforce stringent air pollution measures will increase costs or accelerate the closure of heavily polluting facilities, which will be credit negative for issuers that own these assets. Enforcement actions could also focus on water contamination, leading to increased liabilities for coal ash contamination of groundwater from coal plants (for example, see Duke Energy Corporation: North Carolina coal ash settlement is credit positive, despite impairment and lower ROE). The release of harmful airborne particulates or ozone is also likely to come under greater scrutiny and enforcement.

Financial system facing new landscape of transparency requirements

Greater transparency around material ESG issues will increasingly affect access to capital and asset values in high-risk sectors. There are measures being proposed top down and bottom up through the financial system that will open up new levels of transparency. Such requirements will be initially concentrated in Europe regarding climate-related disclosures, but will inevitably cross over into other regions and issues. These attempts to create a connected flow of information from both companies and the financial institutions that have exposure to them will have a greater impact on the cost of capital as they are rolled out during 2021. Efforts to crack down on greenwashing are being deployed to protect consumers and ensure alignment with energy and climate policy. As shown in Exhibit 3, the EU's sustainable finance strategy is creating a new landscape of standards and transparency that financial institutions will have to navigate.

Exhibit 3
Widening array of sustainability standards and disclosure requirements to have increased impact
Overview of the EU's sustainable finance strategy and prudential oversight initiatives



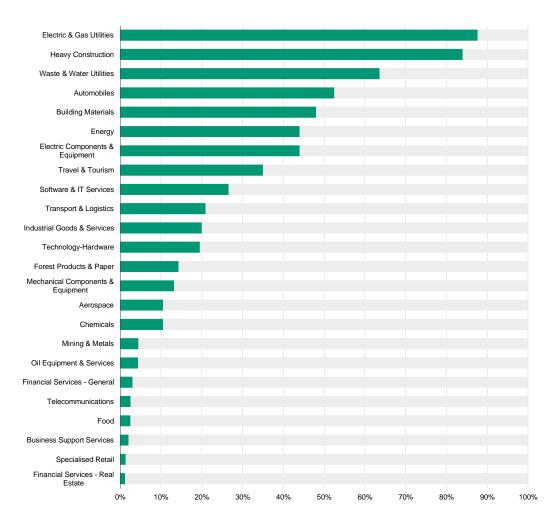
Source: Moody's Investors Service

At the macro level, central banks are driving efforts among banks and insurers to conduct climate stress tests, which they will then review at the system level. The Bank of England's initial stress test requirements were delayed until 2021, and other central banks are also conducting pilots (see <u>Disclosure rules will make UK climate stress test of banks and insurers more accurate</u>). The financial sector's response to climate change will be under greater scrutiny this year, with Mark Carney's leadership of the United Nations Climate Change Conference's (COP26) Private Finance Agenda and the addition of the US Federal Reserve to the Network for Greening the Financial System initiative at the end of 2020. The latter is a sign that US financial regulators, such as the Securities and Exchange Commission (SEC), are likely to place more importance on ESG issues under the Biden administration. The EU is also due to publish its renewed sustainable finance strategy in 2021, which will provide a roadmap to support the objectives of the European Green Deal.

At the heart of the new regulations being deployed in 2021 is the EU Sustainable Finance Disclosure Regulation, which will take effect in March. This regulation requires EU-regulated financial institutions to disclose how they assess sustainability risks, and has broad-ranging scope including banks, insurers, pensions funds and asset managers. New regulations will improve the transparency of sustainability risks and impacts, enabling greater scrutiny and facilitating consumer choice. Products that actively promote environmental or social characteristics will have to describe how this is achieved; and exposure to entity-level adverse impacts must also be published.

Expected revisions to the Non-Financial Reporting Directive will be introduced to enhance corporate reporting of environmental and social issues in order to facilitate the collection of data and assessment of exposure by financial actors. The EU Taxonomy Regulation aims to define EU-recognized criteria for identifying environmentally sustainable economic activities and thereby better align the financial system with longer-term policy objectives, such as EU 2030 climate targets. This will drive improved disclosures by corporations and ultimately by investment firms, which are reporting details about their funds' holdings. Some sectors are intrinsically more aligned with the taxonomy that others, as shown in Exhibit 4.

Exhibit 4
Proportion of companies engaged in environmentally sustainable economic activities varies widely by sector
Share of companies with EU taxonomy-aligned revenues per sector



Source: VigeoEiris

Reinforcing these policy initiatives are market-based initiatives that in 2021 will increase momentum for companies that are better positioned on ESG issues. A heightened sense of urgency about climate change will be increasingly reflected in the investment and business decisions of investors, lenders and insurers, as many of them seek to minimise their exposure to the most carbon-intensive activities, such as coal mining, Arctic oil drilling or oil sands extraction (see Retreat from coal reduces liability and stranded asset risk, a credit positive). This will increasingly restrict the options available to certain companies, increasing costs.

Voluntary initiatives such as the Net Zero asset owners alliance and the Paris Aligned Investment initiative, which have growing memberships, are a sign that investors are looking to demonstrate decarbonisation of their portfolios. Avoiding the most carbonintensive activities is one way to deliver this quickly. While marginal divestment of securities is not likely to devalue a company, it will be worth monitoring the impact of stricter transparency rules that are being implemented this year in Europe. According to the Banque de France, French funds reduced their fossil-fuel holdings by 40% following the implementation of Article 173 of the French Law on Energy Transition and Green Growth.

As environmental concerns continue expanding beyond climate change, natural capital will move up the agenda in 2021. The creation of the <u>Task Force on Nature-related Financial Disclosures</u> will focus more attention on these issues, building on the work of the Task Force on Climate-Related Financial Disclosures We expect more visibility of natural capital risks, where dependency on dwindling

natural resources starts to impact business operations. Innovation will also create opportunities for sustainable activities that align with approaches such as the circular economy. These issues demonstrate the overlap between environmental issues and societal trends as the next generation of consumers express the preferences.

Natural capital risk is largely focused on consumer product sectors, where the interests of the next generation of consumers are influencing corporate behaviour, informed by the application of technology to monitor and share behaviour. For example, consumers are increasingly applying their personal values to purchasing decisions, leading them to seek out products that are produced in a sustainable or ethical fashion. These shifting consumer preferences will be passed down the supply chain and will be credit negative for those issuers that are not able to align themselves with this growing share of the market. The willingness of many consumers to pay slightly more to cover the cost of stricter production standards or responsibly procured materials limits the downside for companies seeking to address this demand.

There is also growing consumer and stakeholder pressure to demonstrate real world positive impact. From a credit perspective this also links to the opportunities available to enter/grow new markets, for example by providing access to water, energy, healthcare or financial services, which is reflects in a growing number of <u>funds and initiatives</u> seeking to demonstrate how investments align with UN Sustainable Development Goals.

Corporate governance initiatives to increase board diversity

We expect policy initiatives in respect of board diversity to start driving changes on corporate boards in 2021 and beyond. This will combine with strengthening investor activism and engagement on ESG issues as the spotlight increasingly falls on corporate leadership in respect of social issues, driven in part by last year's large-scale protests in the US over racial inequality. There are new disclosure rules, board diversity listing requirements and investor initiatives in a growing number of markets:

- » Nasdaq Inc. (Baa2 stable) filed a proposal in December with the SEC to require that all Nasdaq-listed companies disclose board diversity statistics and that they have at least two diverse directors, including one woman and one underrepresented minority or person who identifies as LGBTQ+ (or explain why they do not meet this requirement).
- » <u>Pending legislation in the Netherlands</u> would require supervisory boards of larger companies to be at least one-third female and one-third male, prohibiting appointments that do not support this.
- » The German cabinet <u>approved a bill in January</u> to be put to parliament which will require listed companies with four or more executives to appoint at least one woman to their executive board. This builds on the previous requirement of a 30% quota for women on supervisory boards.
- » <u>California Assembly Bill 979</u>, which was signed into law in September, requires that the boards of publicly traded companies based in the state have at least one director from underrepresented communities by the end of 2021, rising to at least two out of five to eight directors and at least three out of nine or more by the end of 2022. The new law follows Senate Bill 826, which was enacted in 2018 and established similar mandates for gender diversity on corporate boards.

California's expansion of board diversity requirements beyond gender-related mandates offers insight into what may emerge on a broader scale in Western capital markets. These requirements tend to increase board turnover, with historical data showing a correlation between board-level gender diversity and credit quality, although it falls short of demonstrating direct causation (see Board-level gender diversity show positive correlation with higher ratings). Companies that lag in their efforts to diversify their boards are also more likely to be subject to investor activism and face heightened exposure to reputational risk. Over time, investors are also likely to pay greater attention to the diversity of a company's workforce, rather than just its leadership team.

We also expect greater scrutiny of management of sustainability issues in preparation for the EU's planned introduction of <u>sustainable</u> <u>corporate governance requirements</u>. Proposed requirements include due diligence of human rights protections through operations and the supply chain. This builds on the UK's Modern Slavery Act requirements for corporate statements on modern slavery and human trafficking. Cases like <u>Rio Tinto plc</u>'s (A2 stable) destruction of an Aboriginal heritage site in Australia in 2020 to expand an iron ore mine illustrated how the failure of governance systems to identify and manage social risks appropriately can ultimately cost a CEO their job.

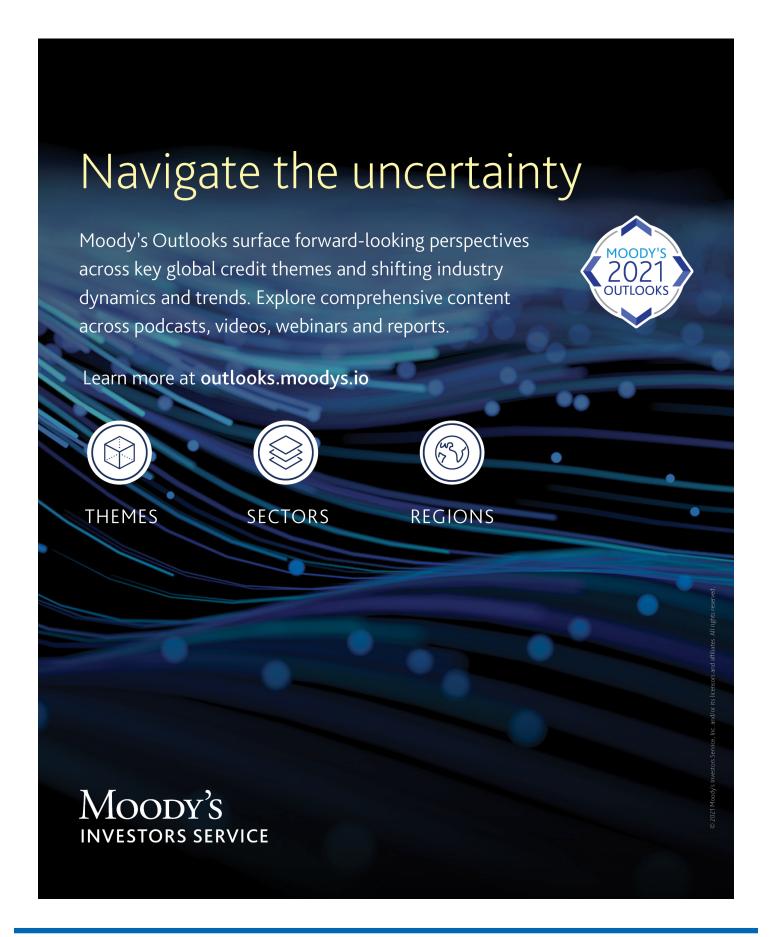
Moody's related publications

Sector In-Depth

- » ESG Asia-Pacific: COVID-19 green recovery spending varies across the region, driving credit divergence, 13 January 2021
- » ESG Global: Heat map: Sectors with \$3.4 trillion in debt face heightened environmental credit risk, 14 December 2020
- » Airlines Global: More infections, stringent travel restrictions will slow air travel recovery in 2021, 18 November 2020
- » Credit Conditions Global: COVID-19 will quicken shift to tripolar economy, with widespread negative effects, 17 November 2020
- » <u>Automotive Manufacturing and Parts Suppliers Global: Coronavirus to have lasting effect on capacity, supply chains and electrification, 17 September 2020</u>
- Electric Utilities and Power Companies US: Nuclear operators face growing climate risk but resiliency investments mitigate impact,
 18 August 2020
- » ESG Global: COVID effects likely to accelerate the energy transition, 18 June 2020
- » ESG Global: Climate scenarios vital to assess credit impact of carbon transition, physical risks, 10 March 2020
- » Banking Cross Region: Banks' disclosure of climate risk improves, but visibility over financial impact is limited, 4 March 2020
- » ESG Europe: Board-level gender diversity shows positive correlation with higher ratings, 2 March 2020

Cross-Sector Rating Methodology

» General Principles for Assessing Environmental, Social and Governance Risks Methodology, 14 December 2020



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