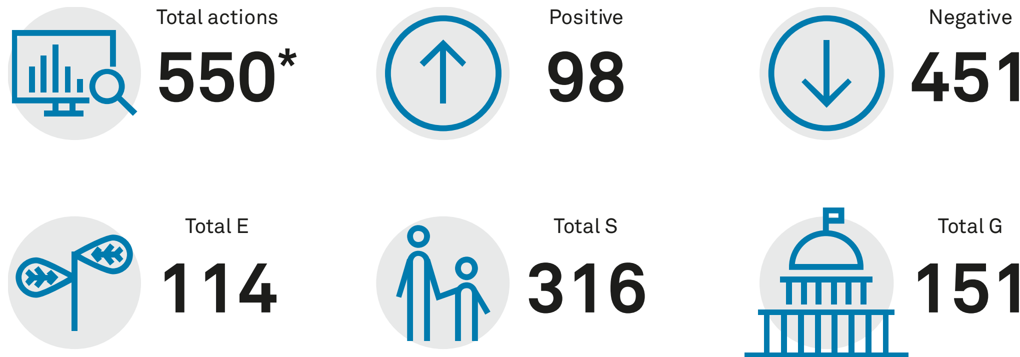
ESG In Credit Ratings Newsletter

January 2022

S&P Global Ratings

This report does not constitute a rating action

By The Numbers – Full-Year 2021 ESG-Driven Credit Rating Actions



*Rating actions comprise rating, CreditWatch, and outlook changes over January-December 2021. Includes one issuer which was revised to CreditWatch Developing" from "Stable". Structured finance actions relate to ESG impacts by transaction (tranche), while for other sectors the impact is measured on the issuer credit rating. §The sum of social, governance and environmental actions exceed total ESG rating actions because some actions were influenced by multiple factors. ESG--Environmental, social, and governance.

Key Takeaways

– Germany's tighter deadline for achieving net-zero emissions by 2045 instead of 2050, implemented through an amendment to its Climate Change Act in August 2021, has put industries on notice.

– Of the 35 largest corporates we rate in Germany, the top-five emitters account for about 80% of scope 1 and 2 emissions in our data set, and 35% do not yet have a net-zero target in place, which validates the government's more aggressive timeline.

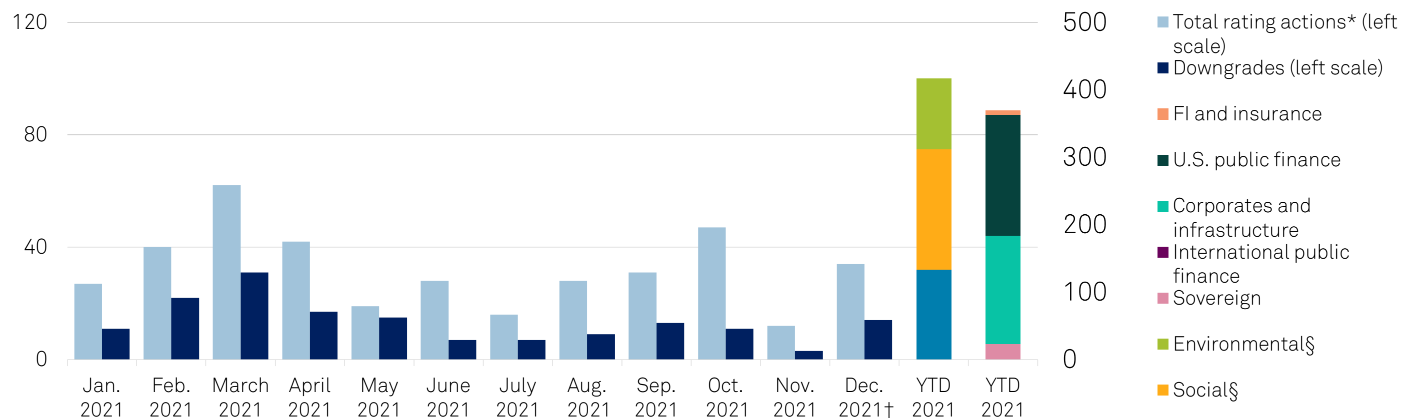
– Although stepping up efforts to reduce greenhouse gases comes with a hefty price tag, German businesses could gain a competitive advantage over the long term, in a market where most players will eventually need to innovate or reflect the additional costs in their products and services.

CONTENTS

Tightened Net-Zero Transition Deadline Could Prove Tough For German Companies	3
Overview: ESG Credit Ratings	7
Sovereigns & IPF	8
U.S. Public Finance	10
Corporates & Infrastructure	12
Financial Services	14
Structured Finance	15
Appendix	17
ESG Research Highlights	18
ESG In Ratings Criteria-Related Commentaries	20
Analytical Contacts	22

For a deeper dive into sustainable finance developments, see our ESG Sustainable Finance Newsletter, Jan. 27, 2022.

ESG-Related Credit Rating Actions Excluding Structured Finance (Jan.- Dec. 2021)



*Rating actions comprise rating, CreditWatch, and outlook changes over January-December 2021. §The sum of social, governance, and environmental actions slightly exceeds total ESG-related rating actions because some actions were influenced by multiple factors. †Includes one issuer for which the outlook was revised to CreditWatch Developing" from "Stable". YTD--Year-to-date. Source: S&P Global Ratings.

ESG-Related Credit Rating Actions Including Structured Finance (Jan.-Dec. 2021)

	Sovereigns	International public finance	U.S. public finance	Corporates and infrastructure	Structured finance	FI and insurance	Total
Downgrade	11	10	78	57	131	4	291
CreditWatch negative	0	0	46	16	24	0	86
Downward outlook revision	7	1	44	22	0		74
Upgrade/Upward outlook revision	5	5	11	66	9	2	98
Total ESG-related rating actions*	**23**	**17†**	**179**	**161**	**164**	**6**	**550†**
Of which social§	14	14	38	110	138	2	316
Of which governance§	13	3	85	27	17	6	151
Of which environmental§	0	0	74	31	9		114

*Rating actions comprise rating, CreditWatch, and outlook changes over January-December 2021. Structured finance actions relate to ESG impacts by transaction (tranche), while for other sectors the impact is measured on the issuer credit rating. §The sum of social, governance, and environmental actions exceeds total ESG rating actions because some actions were influenced by multiple factors. †Includes one issuer for which the outlook was revised to CreditWatch Developing" from "Stable". ESG--Environmental, social, and governance.

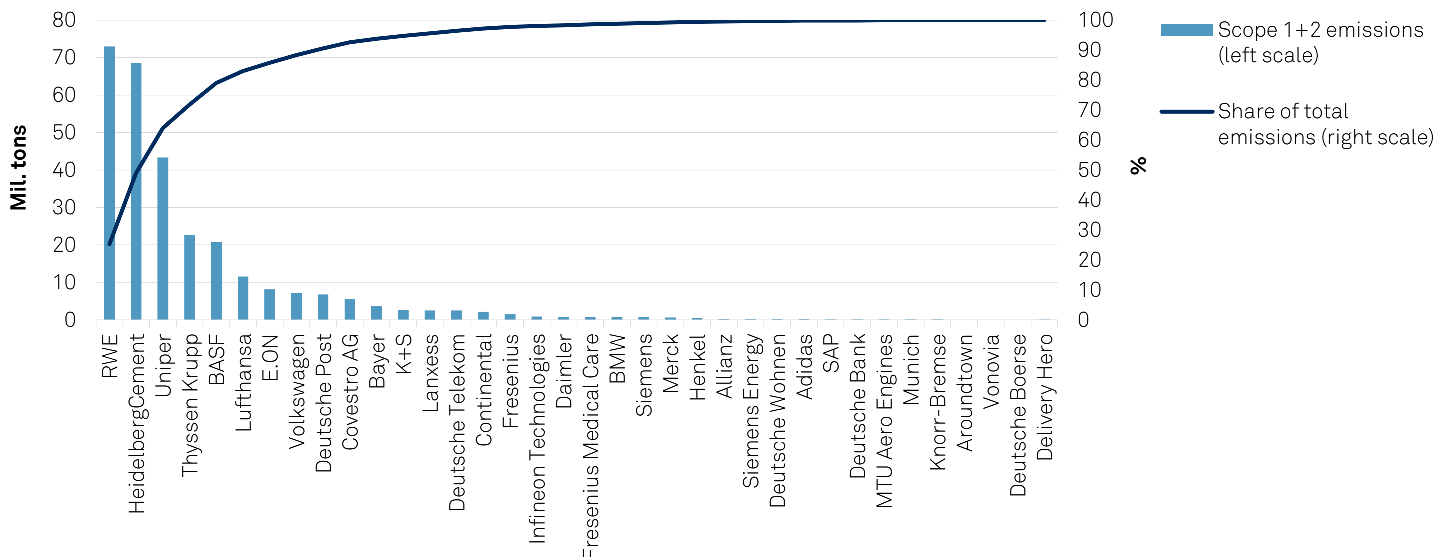
Tightened Net-Zero Transition Deadline Could Prove Tough For German Companies

The target year for Germany to become climate neutral shifted to 2045--five years earlier than the EU's deadline of 2050--following a revision to the country's 2019 Climate Change Act (Klimaschutzgesetz), which focuses on national emissions: direct (scope 1), indirect from energy use (scope 2), and those outside a company's control (scope 3) if they occur within Germany. Scope 3 emissions could complicate matters for corporates like real estate, utility networks, car, and chemical producers that rely on third-party activities and suppliers, while many banks are targeting 2050 for their portfolios to be emission free. Germany also aims for a 65% reduction in national emissions by 2030 (from 1990's levels). The new targets are more ambitious than the Fit for 55 package introduced under the European Green Deal, which requires a 55% reduction by 2030, or the 45% recently agreed at COP26.

In our report, "One-Third Of German Companies Are Behind On New 2045 Net-Zero Deadline," published Nov. 29, 2021, we highlight that of the 35 largest corporates we rate in Germany, five account for 80% of scope 1 and 2 emissions, while the remaining 30 companies account for only 20%. The focus on greenhouse gas (GHG) emissions remains concentrated in sectors such as utilities, cement, steel, transport, and--to a lesser extent--chemicals. The utilities and transport sectors still have the largest GHG deliverables, since emissions need to drop by about 40% from today's levels to be in line with the 2030 requirements.

Five Of Germany's Largest Corporates Account For 80% Of Emissions

Scope 1 and Scope 2



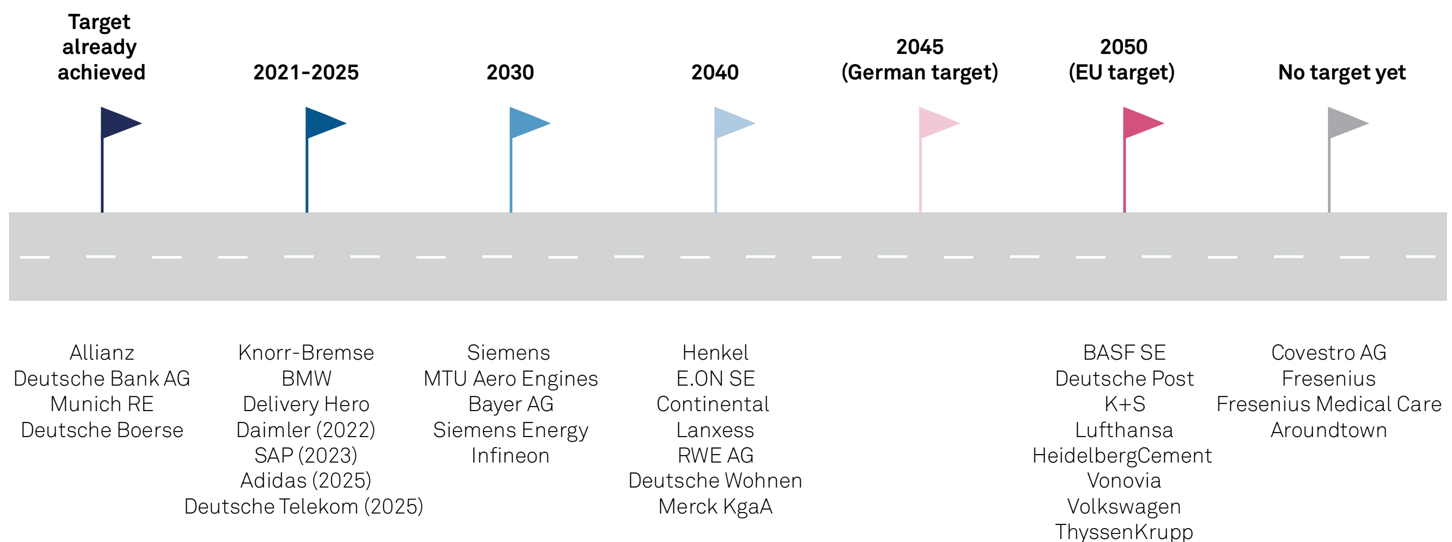
Source: S&P Global Ratings.

The impact of emissions on credit ratings is likely to keep increasing. The financial effect on German corporates of accelerated emission-reduction timelines depends on several factors, including how public policy, regulation, and consumer behavior evolve, as well as the competitiveness of alternative products and the extent to which higher costs can be passed through to the end consumer. Evolving regulation, both at the national and EU levels, could lead to a change in German companies' profit and business models as part of the transformation to a net-zero economy. This is also likely to influence their creditworthiness, depending on companies' success in adapting their business models to new regulation, and the influence of any offsetting measures that rated entities could take (such as revising dividend policies) should their profitability change. However, German industries generally enjoy strong access to capital

markets, which should help them to proactively modify their energy mix and products, and finance the sizable capital expenditure (capex) associated with investing in new technologies or emission-abatement projects--as long as a sound strategic plan is in place. Globally harmonized policies and financial backing are prerequisites for a successful shift away from fossil fuels.

Some German corporates will need to modify their net zero targets. About 65% of the country's leading corporates have already established a faster schedule to achieve climate neutrality, as shown in the graphic below. However, eight German corporations still have 2050 targets, including the world's largest chemicals company, BASF, as well as Volkswagen and Lufthansa. Companies' definitions of "net zero" differ, but most focus on scope 1 and 2 emissions, which are under their control. In addition, the depth of company reporting on sustainability and ESG is still not homogenous, and base years vary, making comparisons difficult. Furthermore, emission-abatement ability varies substantially from one industry to another, given the differences in the availability of technology and alternative products. However, about half of the companies we examined already link the remuneration of top management to the achievement of tangible ESG goals, which we view as positive, and which should be instrumental in managing the transformation. This should create the necessary traction for technological advances and repositioning of some business activities.

Carbon-Dioxide Neutral Target Year For Own Production (Scope 1 And 2)



Source: S&P Global Ratings.

Germany's Climate Change Act amendment sharpens legislation in three areas. The German government first introduced the Climate Change Act in 2019 to provide clear guidance and rules regarding the reduction of GHGs to achieve its obligations under the Paris Agreement. The law was intended to build a framework that allows the relevant government ministries to more closely manage the progression of that transition. Once a year, ministries allocated to industry sectors were to review the target outlined in the Act and implement legislation specifically for those sectors. However, the first version of the law was short-lived, because Germany's Constitutional Court warned the government of several shortcomings. The main criticism was that the law in its initial form provided clarity only until 2030. The government reacted swiftly, which led to the current revised version being passed into law on Aug. 31, 2021, which included the following amendments:

- First, and most important, it introduced an increased rate of emissions reduction until 2030, in particular for utilities and industrials;
- Second, it established a plan for reducing GHG emissions in 2031-2040 (see table below), which envisages a 65% reduction of carbon dioxide (CO_2) emissions from the 1990 level by 2030, and 88% by 2040.

- Third, it introduced a CO_2 price, which will only be charged to transport and buildings, since industrials and utilities are already covered by the EU's Emissions Trading System (see "A Heightened Focus on CO_2 Emissions Stokes Interest In The Carbon Markets," published Sept. 21, 2021). This CO_2 price will be added to fossil fuel costs and result in additional costs for end consumers, which is intended to prompt a change in behavior and a switch to alternative energy sources. For buildings, we understand the discussion is ongoing, but the most likely outcome is that the cost of the CO_2 tax will be split equally between the end user and the landlord.

Germany's Emissions--Yearly Reductions Required For 2031-2040

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Yearly reduction measured against 1990 (%)	67	70	72	74	77	79	81	83	86	88

Source: Umweltbundesamt, March 2021

For more information, see our report, "One-Third Of German Companies Are Behind On New 2045 Net-Zero Deadline," published Nov. 29, 2021.

Carbon-Intensive Industries Face Increased Scrutiny

In the coming years, carbon-intensive industries will remain under pressure to present viable plans for transforming their current carbon footprint in line with a net-zero economy. In our view, a detailed plan with regular progress updates is likely to be important for carbon-intensive sectors to remain attractive to investors, which are increasingly favoring carbon-light industries.

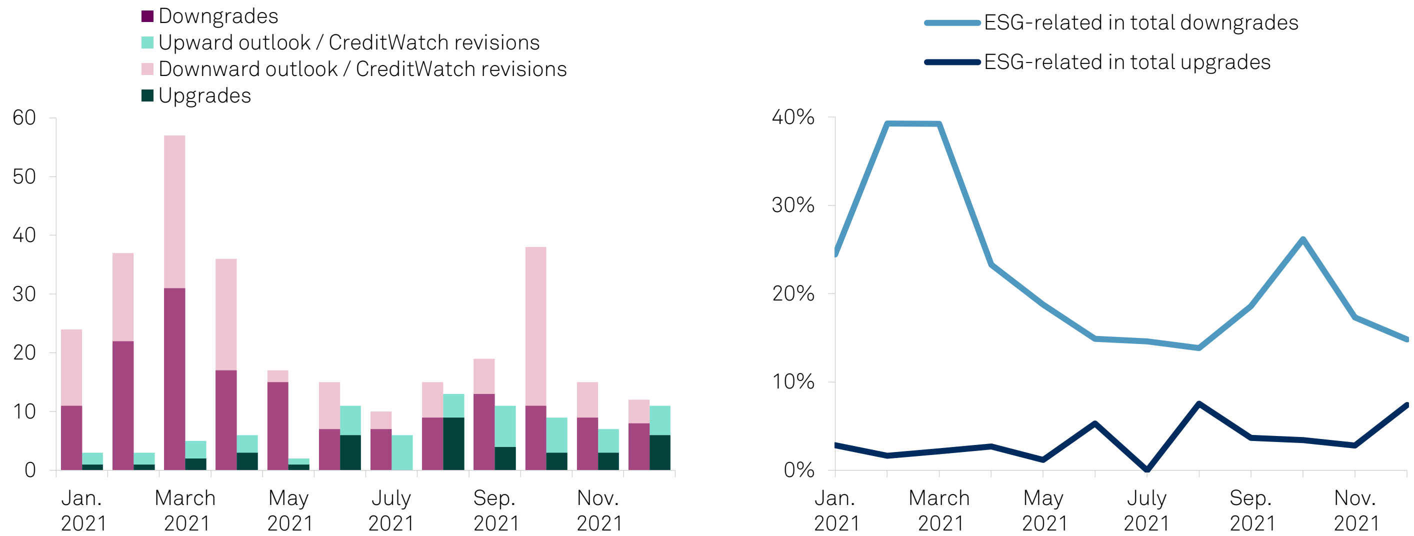
- **German utilities aim to beat the new net-zero deadline.** Power-generation companies are among the top CO_2 emitters, as measured by scopes 1 and 2. RWE has set a very ambitious target for its production to become carbon neutral by that measure as of 2040, while for EnBw and Uniper's European generation operations, the target year is 2035--10 years earlier than required by the German Climate Change Act. To achieve this, RWE and Uniper will exit their current coal power production (hard coal and lignite), potentially targeting an earlier date in 2030 compared with the already-mandated 2038 in Germany. This is also in line with the ambition of the new German government--in place since December 2021--which is targeting an earlier exit from coal power production and aims that by 2030, 80% of power production should stem from renewable energy sources. Uniper announced that it will reduce its German coal generation by about 70% by 2025 to about 1.1 gigawatts (GW), and RWE plans to reduce its German coal capacity by about 70% to about 4 GW by 2030. In contrast, utilities with a large network--such as E.ON--have a much lower scope 1 and 2 CO_2 emission footprint, and E.ON has set a goal of achieving net-zero scope 1 and 2 emissions by 2040.
- **The cement industry, another high CO_2 emitter, will find it tough to achieve an earlier deadline.** European cement companies have managed to substantially lower emissions in the past few years, thanks to significant investments in improving plants' thermal efficiency and increasing the use of alternative fuels, such as biomass. HeidelbergCement, the largest cement producer we rate in Germany--and among the largest in the world--has cut carbon emissions per ton of cement by 23% since 1990. Its emissions stood at 576 kilograms per ton (kg/ton) of cement in 2020. Energy efficiency remains the most relevant factor fueling emissions reduction until 2030, when most large European groups intend their emissions to be below 500 kg/ton. HeidelbergCement aims to reduce its scope 1 net CO_2 emissions to 525 kg/ton of cement by 2025, and less than 500 kg/ton by 2030. It has also committed to offering carbon-neutral concrete across its product portfolio by 2050 at the latest. In our view, beyond 2030, a significant drop of emissions can only be achieved by wider use of technologies that are still under development, such as carbon capture and storage, and by much greater use of recycled materials.
- **Lufthansa, like other airlines, supports the aviation sector's climate-protection goals and aims to achieve carbon neutrality by 2050.** The main ways in which Germany's national carrier intends to achieve this is through continuous fleet modernization, increasing the use of alternative fuels, emissions-reduction initiatives, and offsetting activities. The difficulty in decarbonizing is shown by the sector's modest 8% emissions reduction since 1990, while a further decrease of 40% is needed by 2030. As a result, carbon-offset regulations will likely need to play a bigger role, or the rising carbon cost attached to airline tickets may dampen passenger demand growth, unless there is a technological breakthrough in terms of new engines. For example, the prospect of airplanes running on hydrogen is only likely to be realized well beyond 2030. In the

meantime, airlines are seeking to modernize their fleets and opt for fuel- and CO_2-efficient aircraft. The average age of Lufthansa's fleet is 12 years, somewhat above the global industry average, potentially requiring larger capex and higher operating costs, which may result in an increase in leverage.

- **In the chemicals sector, BASF has committed to achieving net zero emissions by 2050 and reducing its absolute CO_2 emissions.** BASF plans emission reductions of 25% by 2030 compared with 2018 (or by 60% compared with 1990) despite significant growth ambitions, including the construction of another Verbund site in South China to be completed by 2030. While renewable energy will be key to achieving these targets, the company is also developing and implementing new, low-emission processes. In line with the company's projections, we factor in limited capex (less than €1 billion) related to this transformation in the first half of this decade, with only a slight rise (€2 billion-€3 billion) in the second half. In the longer term, BASF is planning much larger investments (€10 billion or higher) beyond 2030 to ramp up the use of renewable energy and build world-scale production plants based on new technologies.
- **Some automakers have yet to fully adapt to the new targets, but process improvements will help over time**. Consistent with current legislation, Daimler has set a target of offering only CO_2-neutral new vehicles by 2039, whereas Volkswagen (VW) and BMW are so far focused on their target of becoming climate neutral by 2050. That said, all three have reduced scope 1 and 2 emissions meaningfully over the past few years, and both BMW and Daimler are expected to report CO_2 neutrality in their own production by the end of 2021 and 2022, respectively. This could be thanks to a strong focus on shifting to green energy, optimizing production processes, entering offsetting projects, and purchasing certificates. BMW and Volkswagen have set interim targets on the path to achieving their 2050 net-zero ambitions, which include scope 3. By 2030, BMW aims to cut CO_2 emissions per car in the supply chain by 20% versus 2019, and by 50% versus 2019 in the use phase. VW targets a reduction in total lifecycle GHG emissions from light vehicles of almost 30% to 31.6 tons of CO_2 per vehicle by 2025 from 43.8 tons of CO_2 per vehicle in 2015.

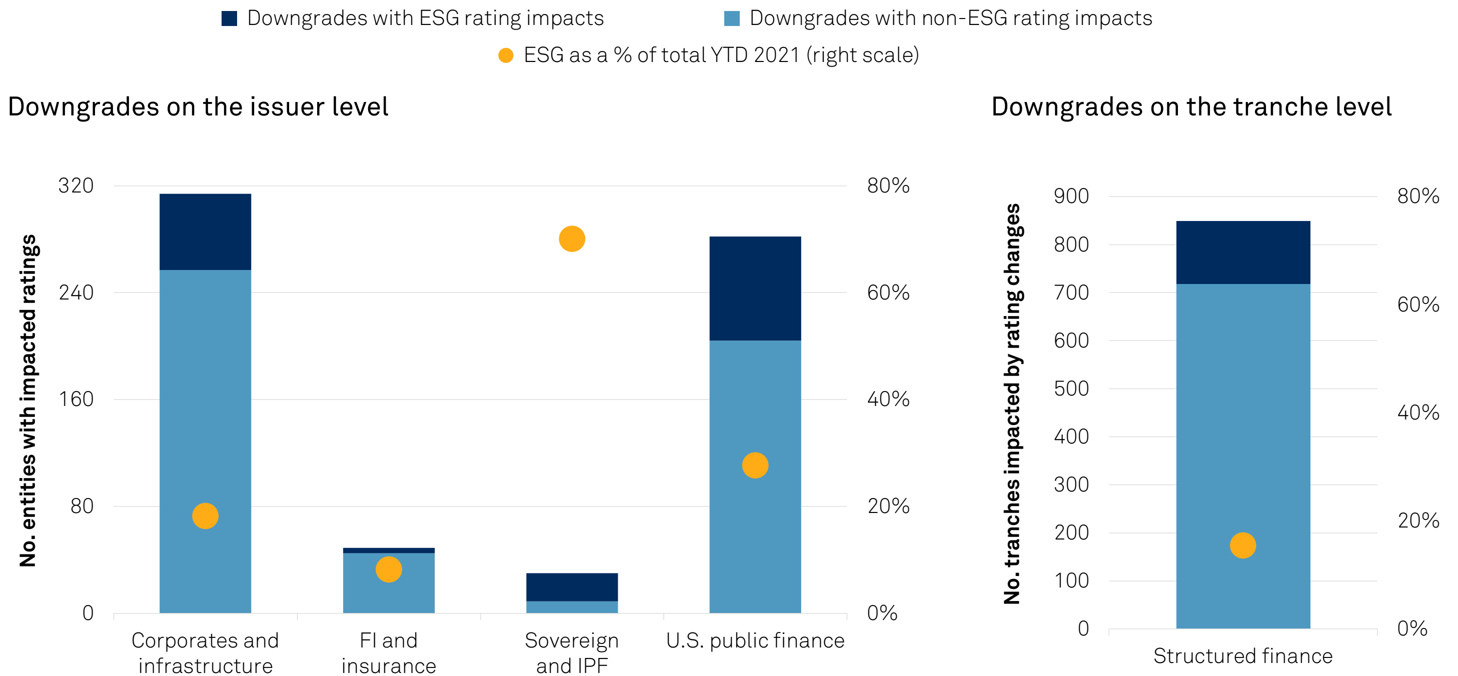
Overview: ESG Credit Rating Actions

Monthly Breakdown Of ESG-Related Credit Rating Actions (Excluding Structured Finance)



Source: S&P Global Ratings.

ESG Versus Non ESG-Affected Credit Ratings (January-December 2021)

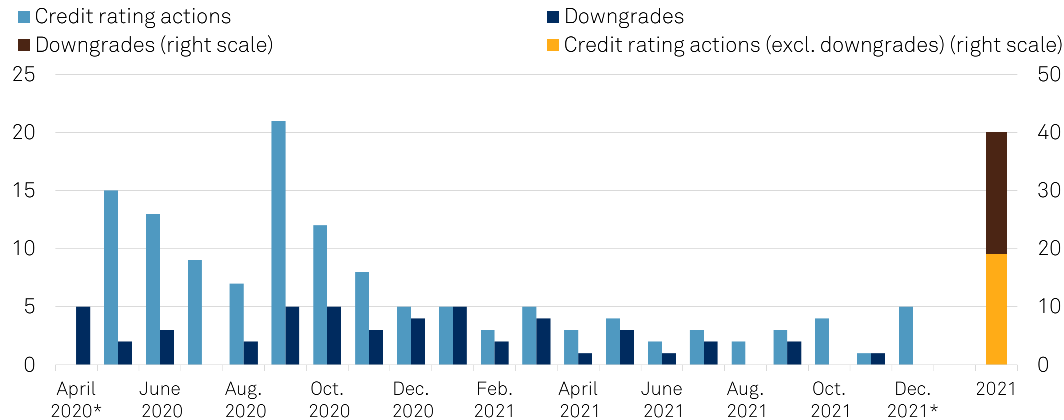


Note: Includes downgrades between January and December 2021. Entities reflect issuers (ultimate parent only without subsidiaries), except for issues/tranches for structured finance. ESG--Environmental, social, and governance. YTD--Year to date. Source: S&P Global Ratings.

Sovereigns And International Public Finance

Download table of all ESG-related rating actions

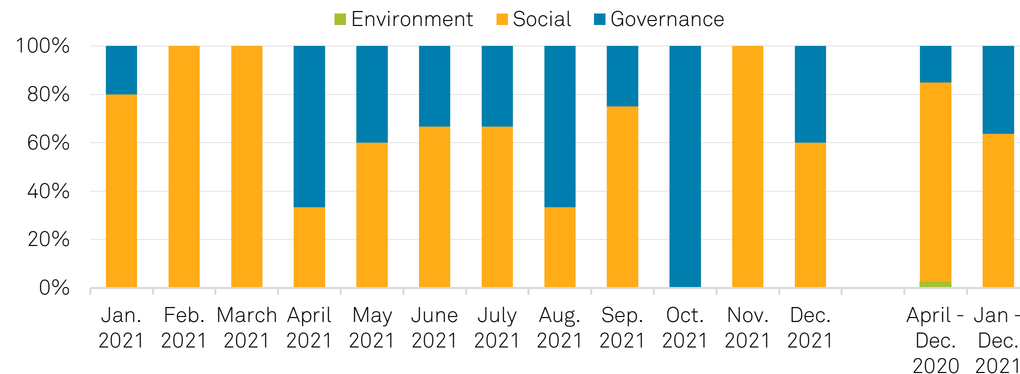
Sovereigns And International Public Finance ESG-Related Credit Rating Actions



Note: Rating actions comprise rating, CreditWatch, and outlook changes. *April 2020 rating actions amounted to 43, of which 38 corresponded to negative outlook revisions. * December 2021 includes one issuer which was revised to "CreditWatch Developing" from "Stable". ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Sovereign And International Public Finance: ESG-Related Credit Rating Actions By ESG Factor

Share of total ESG-related credit rating actions



ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Health and safety continued to be the most-cited factor among ESG-driven sovereign credit rating actions in 2021, reflecting the serious negative credit impact of the pandemic. However, governance factors are becoming more prominent drivers of our rating actions, both positive and negative.

We undertook 23 credit rating actions on sovereigns in 2021 that cited ESG factors as a key driver, down from 56 such cases in 2020. Of those 2021 actions, 11 (48%) were downgrades and another seven (30%) were outlook revisions downward (to stable from positive or to negative from stable). The remaining six comprised upgrades or outlook revisions upward, and one removal from CreditWatch.

Of the 18 downgrades and downward outlook revisions, 13 were driven entirely or partly by health and safety factors as the negative economic and fiscal impacts of the pandemic continue to reverberate. We cited governance factors for six negative actions: this included governance structure (Peru, Turkey); risk management and internal controls (Papua New Guinea, Sri Lanka); and strategy, execution, and monitoring (Kuwait). A poor or sometimes inadequate policy response

to the challenges posed by the pandemic and global recession led us to worsen our assessment of governance in several sovereigns.

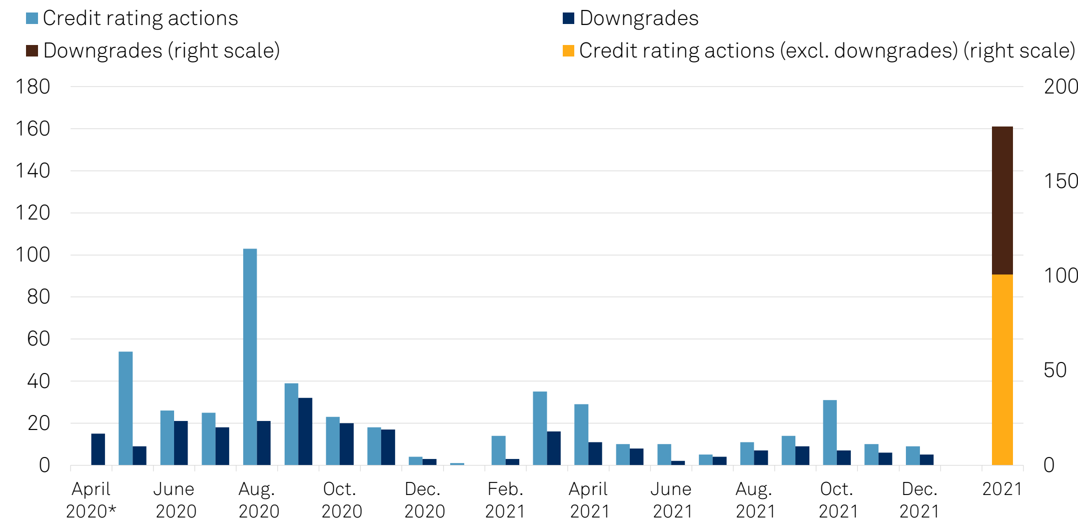
In contrast, we had only one negative rating action in 2021 citing social factors as a key driver. On Nov. 10, 2021, we lowered the rating on Ethiopia to 'CCC' from 'CCC+', citing heightened default risk stemming from rising political uncertainty and civil conflict that began in the Tigray region and has since spread to neighboring regions. We consider civil conflict to fall within social capital factors.

We cited governance factors as the key driver in four out of five positive rating actions (upgrades and upward outlook revisions) driven by ESG factors in 2021. Key governance factors ranged from risk management and internal controls (Vietnam) to strategy, execution, and monitoring (Vietnam, Oman). Our positive revision of Italy's outlook on Oct. 22, 2021, cited other governance factors, chiefly the government's strengthening commitment to comprehensive pro-growth reforms, which we expect will support a strong investment-led recovery and ultimately positively affect public finances.

U.S. Public Finance

Download table of all ESG-related rating actions

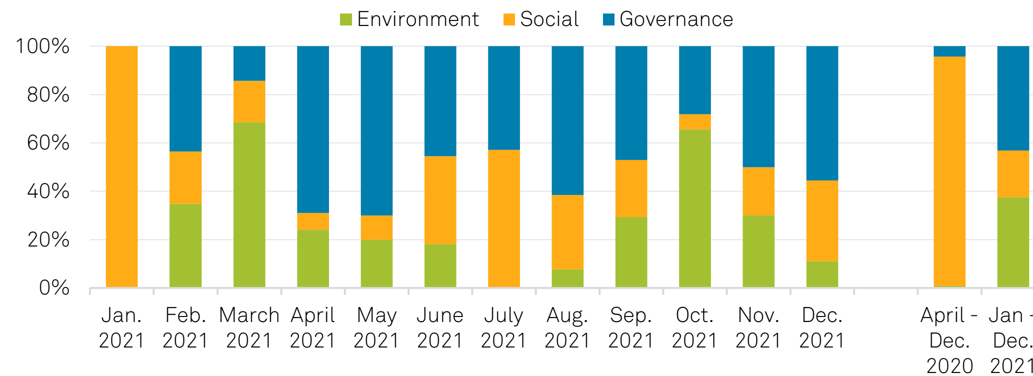
U.S. Public Finance ESG-Related Credit Rating Actions And Downgrades



Rating actions comprise rating, CreditWatch, and outlook changes. *April 2020 rating actions amounted to 451 of which 425 corresponded to negative outlook revisions. ESG--Environmental, social, and governance. Source: S&P Global Ratings.

U.S. Public Finance: ESG-Related Credit Rating Actions By ESG Factor

Share of total ESG-related credit rating actions



Note: There was only one rating change in January. ESG--Environmental, social, and governance. Source: S&P Global Ratings.

In 2021, there were 180 credit rating actions driven by ESG credit factors in U.S. public finance (USPF). The decrease from 2020 represents abatement of the acute credit pressure stemming from the pandemic, which was partially alleviated by federal stimulus funds and progress with vaccination efforts in the U.S. Despite a decline, 29 credit rating actions in 2021 were driven by health and safety social risks, indicating that the pandemic's far-reaching effects continue to disrupt certain sectors.

Since entities on which we provide credit ratings in USPF are typically boundary-based, and generate revenue to cover operations and debt service costs from the economic bases or service areas in which they exist, physical climate risks can have a material influence on our credit ratings. In 2021, physical risks accounted for 70 (39%) of the total credit rating actions driven by ESG credit factors. Winter Storm Uri in Texas drove multiple credit rating actions for utilities that continue managing the outcomes of the event. In addition, water utilities and irrigation districts in California were required to absorb higher water supply costs resulting from the persistent and pervasive drought conditions in the western part of the U.S., which led to a reduction in water allocations from the Colorado River. As we discuss in our report, "ESG in U.S. Public Finance Credit

Ratings: 2022 Outlook and 2021 Recap," published Nov. 29, 2021, acute physical risks, such as hurricanes, wildfires, and floods, have led to some rapid credit rating deterioration, while chronic risks, such as sea level rise and drought, may begin taking an additional toll on creditworthiness over time.

Case Study: Louisiana Energy & Power Authority 'BBB' LEPA Units No. 1 and No. 2 Bond Ratings Removed From CreditWatch; Outlook Negative, Dec. 14, 2021

S&P Global Ratings affirmed its 'BBB' long-term rating on Louisiana Energy & Power Authority's (LEPA) (Unit No. 1) project revenue bonds and 2013 project revenue bonds (LEPA Rodemacher No. 2) and removed the rating from CreditWatch with negative implications, where it had been placed on Sept. 10, 2021. The outlook is negative. The credit ratings were previously downgraded and placed on CreditWatch with negative implications following Hurricane Ida, which made landfall in August 2021.

The ratings were removed from CreditWatch with negative implications given Houma, LEPA's weakest participant and key participant from a credit quality standpoint, has not experienced a material disruption related to revenue collections, 99.8% of customers' power was fully restored, demand rebounded, and the city plans to improve systemwide hardening to mitigate the impacts of future hurricanes.

We view LEPA's Units No. 1 and No. 2 to have heightened environmental risk, specifically related to hurricanes and severe weather events, as evidenced by Hurricane Ida, which affected member participants' service areas.

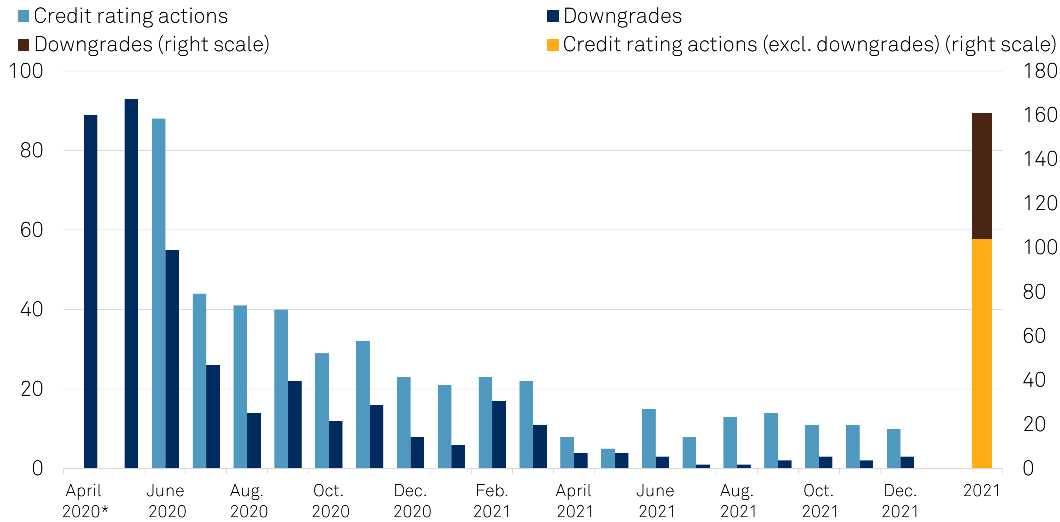
Environmental, social, and governance (ESG) credit factor for these rating actions:

– Physical risk

Corporates And Infrastructure

Download table of all ESG-related rating actions

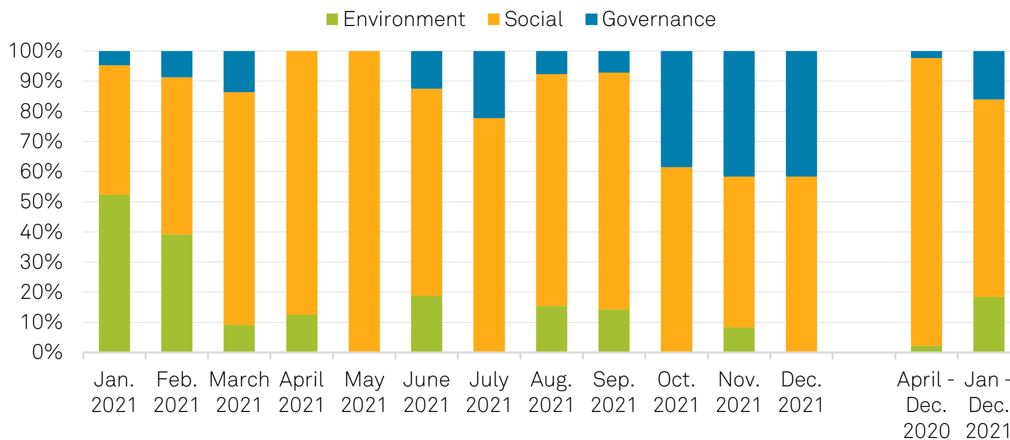
Corporates And Infrastructure ESG-Related Credit Rating Actions And Downgrades



Note: Rating actions comprise rating, CreditWatch, and outlook changes. *April 2020 rating actions amounted to 187, of which 101 corresponded to negative outlook revisions. May 2020 rating actions amounted to 139, of which 44 corresponded to negative outlook revisions. ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Corporates And Infrastructure: ESG-Related Credit Rating Actions By ESG Factor

Share of total ESG-related credit rating actions



ESG--Environmental, social, and governance. Source: S&P Global Ratings.

ESG-driven credit rating actions continued at a pace of about 10 per month in November and December 2021. About half of these related to health and safety, but with more positive actions (nine) than negative ones (three), because many governments, businesses, and households around the world are tailoring policies to limit the adverse economic impact of recurring COVID-19 waves with existing vaccines perceived to provide significant protection against severe illness.

- Entities operating in the European theme and holiday park sector, such as Richmond UK Holdco, Richmond Bidco, and Motion Midco, each saw their ratings raised back to 'B-' from 'CCC+'. By contrast, the risk of a debt restructuring at German gaming firm Safari Beteiligungs led to a downgrade to 'CC', as stricter regulation on vaccination requirements continues to disrupt and change rules for customers' physical access.
- We also stabilized rating outlooks on a few European airlines, but the rapid spread of the omicron variant since has highlighted the inherent uncertainties of the pandemic. More recent

data indicate that passenger numbers at our rated European airports will recover to up to 65% from pre-pandemic levels, albeit with variations depending on the type of traffic. By contrast, we stabilized the rating outlooks on most U.S. airlines in mid-2021 given their much higher share of domestic-oriented traffic.

Idiosyncratic governance impacts also accounted for a high percentage of ESG-driven actions in November and December 2021 (eight out of the total of 21, of which five were negative and three positive).

Case Study: Serba Dinamik Downgraded To 'D' On Missed Coupon Payment, Dec. 10, 2021

This action follows our June 2021 credit rating downgrade to 'B-' from 'B+' on Malaysian engineering and construction company Serba Dinamik. Questions raised during KPMG PLT's fiscal 2020 statutory audit of Serba Dinamik's financial condition had prompted the company to appoint an independent third party to conduct a review. We anticipated that this would complicate the company's efforts to refinance nearly Malaysian ringgit (MYR) 1.7 billion in debt over the 12 months.

Environmental, social, and governance (ESG) credit factors for this rating action:

- Risk management, culture, and oversight
- Transparency and reporting

Case Study: ENCE Energia y Celulosa Outlook Revised To Negative On Pontevedra Mill Concession Uncertainty; 'BB-' Rating Affirmed, Dec. 6, 2021

Spain-based pulp producer ENCE Energia y Celulosa (ENCE) could face the permanent shutdown of its Pontevedra pulp mill in the coming two to three years, should its concession be withdrawn following a legal challenge. This relates to concerns from local organizations about the use of the land where the mill's activities take place. The negative outlook reflects the increased risk of a potential multi-notch downgrade.

Environmental, social, and governance (ESG) credit factor for this change in outlook:

- Social capital

Financial Services

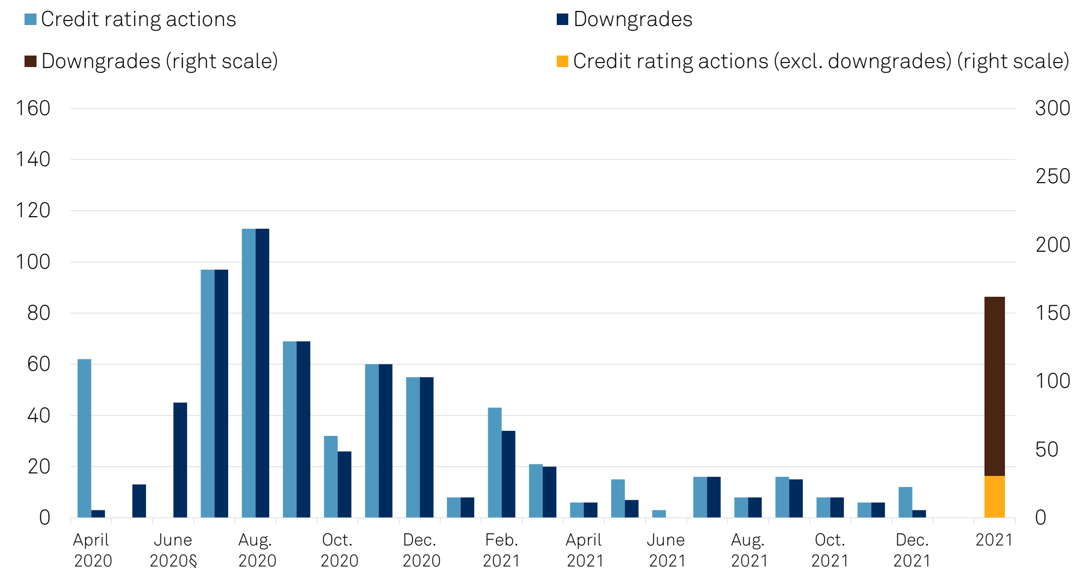
Financial services ratings have experienced very few ESG-related credit impacts in 2021. Since April 2020, the banking and insurance sectors have seen hardly any credit rating or outlook changes directly attributable to ESG factors (even if several negative outlook revisions were triggered by the indirect economic effects of the pandemic). The ESG trends we see as most relevant for financial services companies, and which are growing in momentum, are the effort to tackle climate change and the standardization of ESG reporting. As many countries target a green recovery following the pandemic, banks and insurers have an opportunity to support this in how they allocate capital, through lending, investing, or underwriting. This presents opportunities for growth and returns, but also poses challenges as firms look to manage their exposures to climate risks throughout their value chains. However, because banks and insurers are often dependent on the quality of disclosure from their underlying counterparties (for example, borrowers, policyholders, or investee companies), their ability to reliably assess their own exposures can be undermined if there are gaps in the underlying data.

An increasing number of authorities and regulatory bodies are working on setting supervisory frameworks for banks and insurers to address climate-related risks. Their initial goal is to encourage these businesses to deepen their knowledge of climate-related risks and incorporate them under the current prudential framework. We also expect supervisors to fine-tune their methodologies, including the stress tests, to assess banks' and insurers' vulnerability to these risks. to ultimately ensure financial stability.

Structured Finance

Download table of all ESG-related rating actions

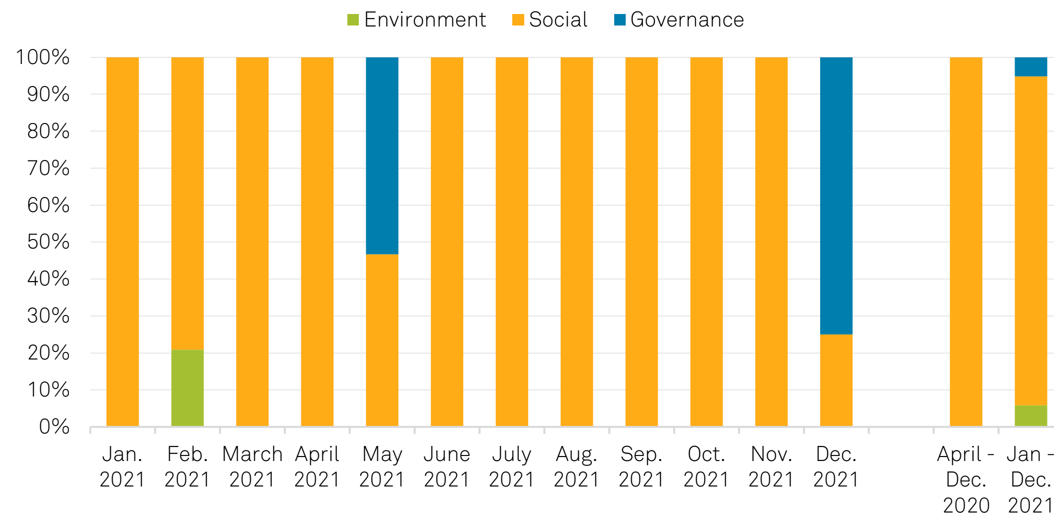
Structured Finance ESG-Related Credit Rating Actions And Downgrades



Note: May 2020 rating actions amounted to 167, of which 154 corresponded to negative outlook revisions. June 2020 rating actions amounted to 182, of which 137 corresponded to negative outlook revisions. ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Structured Finance: ESG-Related Credit Rating Actions By ESG Factor

Share of total ESG-related credit rating actions



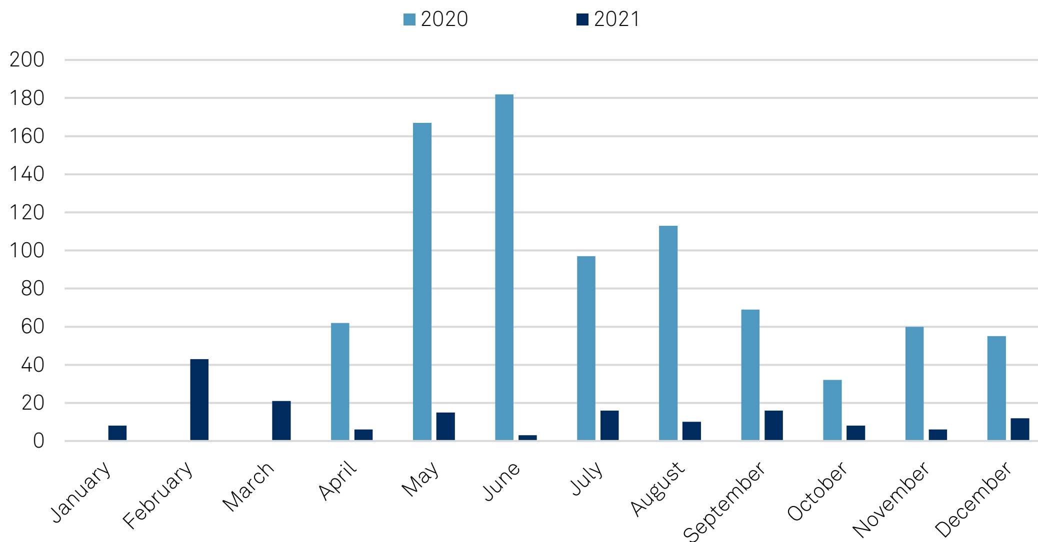
ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Sustainable debt issuance continued to experience significant growth in 2021, yet growth in sustainable structured finance issuance has been limited. We believe this is due to several factors, including the lack of a harmonized definition of what constitutes "green" or "social" collateral, limited origination volumes of ESG-compliant collateral, and the lack of a standardized ESG reporting framework across structured finance asset-classes. There are also concerns from market participants surrounding the legitimacy and credibility of structured finance instruments with a sustainable label. Investors have expressed fears surrounding inconsistent instrument labelling, reporting, and data disclosure, with concerns arising that sustainable debt instruments may not be meaningfully differentiated from their vanilla counterparts.

Looking ahead, we believe there will be greater diversification and innovation in sustainable structured finance instruments. For example, rather than pursue "green" or "social" labelled issuance due to a lack of suitable collateral, we believe structured finance issuers may adopt sustainability-linked structures with key performance indicators (KPI) and sustainability performance targets (SPT) that may not be directly linked to the collateral pool. These structures typically contain a coupon ratchet with a step-up or step-down, depending on whether the SPTs are achieved. In addition, while concerns remain regarding sustainable labels for use-of-proceeds securitizations, whereby the seller commits to use the issuance proceeds to originate new eligible loans rather than the collateral itself satisfying sustainability criteria, some market participants have acknowledged that such structures may be necessary to facilitate change. As such, we expect to see more sustainable labelled issuance in 2022 for "use-of-proceeds" transactions, but are not yet expecting a material change in collateral pool compositions. Therefore, we believe there will be a limited impact on our credit rating analysis.

As expected, ESG-related rating actions in structured finance significantly declined in 2021, as most issuers successfully managed the negative credit impacts of the coronavirus pandemic (see chart below). Barring any further systemic shocks, we believe there will continue to be limited ESG-related rating actions in structured finance given the structural mitigants to these risks incorporated in transaction structures.

ESG-Related Total Credit Rating Actions In Structured Finance (CreditWatch, Upgrades And Downgrades)



ESG--Environmental, social, and governance. Source: S&P Global Ratings.

Appendix

COVID-19's direct (ESG) versus indirect (non-ESG) credit rating impact

We consider the COVID-19 pandemic to be a social credit factor when we believe health concerns and social-distancing measures have a direct impact on an entity's activities. Put differently, our data presented here exclude rating actions stemming from the pandemic-induced recession, and from the downturn in oil and gas that started before the COVID-19 outbreak and is tied to oversupply and a price war. For sovereign ratings, however, we see the pandemic's direct and indirect macroeconomic, fiscal, and external impacts as intertwined and feeding into each other, and therefore consider rating actions triggered by the COVID-19-induced recession as health and safety-related.

We have tagged credit rating actions tied directly to health and safety concerns as ESG-driven

One of the clearest examples is airlines, for which demand has significantly dropped due to travel restrictions to stop the spread of the virus. Other examples include auto dealers, which were forced to close their doors due to social-distancing requirements, resulting in lost sales for auto manufacturers. Movie theaters, airports, restaurants, and leisure activities were/have been shut down due to the virus and local requirements for social distancing, resulting in a total cessation of revenue streams and limitations on large and social gatherings.

For the purposes of classifying ESG impacts, we excluded indirect rating actions tied to the pandemic-induced recession.

For example, the recession may ultimately increase the risk of nonpayments for banks or depress asset values, affecting insurers. While important, we have not flagged these as ESG-driven. Similarly, many corporate sectors are indirectly affected; for instance, many consumer products companies have had to reduce their advertising, thereby affecting media companies. Also, job losses and loss of consumer confidence have stopped buyers from making large consumer products purchases.

ESG Research Highlights

ESG in credit ratings industry-related commentaries

- ESG In Credit Ratings Newsletter December 2021, Dec. 1, 2021
- ESG Credit Factors: A Deeper Dive, Nov. 17, 2021
- ESG In Credit Ratings Newsletter October 2021, Oct. 21, 2021
- ESG In Credit Ratings Newsletter September 2021, Sept. 23, 2021
- ESG In Credit Ratings Newsletter July 2021, July 22, 2021
- ESG In Credit Ratings Newsletter June 2021, June 30, 2021

ESG Credit Indicator Report Cards

- https://www.spglobal.com/ratings/en/products-benefits/products/esg-in-credit-ratings

Cross-practice Sustainable Finance

- ESG Sustainable Finance Newsletter, Dec. 1, 2021
- ESG Sustainable Finance Newsletter, Oct. 21, 2021
- ESG Sustainable Finance Newsletter, Sept. 23, 2021
- Navigating The Strengths, Challenges, And Best Practices In Sustainable Finance Frameworks And Transaction Documentation, Jan. 18, 2022
- Mind The Gap: Pledges At COP26 Give Hope But Significant Shortfall Still Exists, Nov. 18, 2021
- Model Behavior: How Enhanced Climate Risk Analytics Can Better Serve Financial Market Participants, June 24, 2021
- Environmental, Social, And Governance: How Sustainability-Linked Debt Has Become A New Asset Class, April 28, 2021
- Environmental, Social, And Governance: Natural Capital And Biodiversity: Reinforcing Nature As An Asset, April 12, 2021
- Six Key Corporate Governance Trends For 2021, March 22, 2021
- Rising Shareholder Activism Mostly Harms Credit Quality, March 17, 2021
- Transition Finance: Finding A Path To Carbon Neutrality Via The Capital Markets, March 9, 2021
- Sustainability In 2021: A Bird's-Eye View Of The Top Five ESG Topics, Jan. 28, 2021

Sovereigns and supranationals

- ESG Overview: Global Sovereigns, Feb. 3, 2021
- How Multilateral Lending Institutions Are Responding To The COVID-19 Pandemic, June 9, 2020

International public finance

- Institutional Framework Assessment: Australian States And Territories, Nov. 9, 2020
- ESG Industry Report Card For Non-U.S. Public And Nonprofit Social Housing Providers, Aug. 4, 2020

U.S. public finance

- ESG In U.S. Public Finance Credit Ratings: 2022 Outlook And 2021 Recap, Nov. 29, 2021

- For U.S. Public Power And Electric Cooperatives, There Are Hurdles On The Path To Decarbonization, Nov. 8, 2021
- ESG Brief: ESG Pension And OPEB Analysis in U.S. Public Finance, Oct. 7, 2021
- ESG U.S. Public Finance Report Card: Texas Governments And Not-For-Profit Enterprises, Sept. 23, 2021
- ESG U.S. Public Finance Report Card: Florida Governments And Not-For-Profit Enterprises, Sept. 9, 2021
- ESG Brief: Cyber Risk Management in U.S. Public Finance, June 28, 2021
- The Top 10 Management Characteristics Of Highly Rated State And Local Borrowers: Through The ESG Lens, June 29, 2021
- ESG U.S. Public Finance Report Card: California Governments And Not-For-Profit Enterprises, June 16, 2021
- Article Examines How California's Wildfire Risks Affect Utility Credit Quality, June 4, 2021
- ESG Brief: Emerging Themes In U.S. Public Finance, June 3, 2021
- Better Data Can Highlight Climate Exposure: Focus On U.S. Public Finance, Aug. 24, 2020

Corporates and infrastructure

- One-Third Of German Companies Are Behind On New 2045 Net-Zero Deadline, Nov. 29, 2021
- European Electric Utilities Face Higher Social Risks Than Their U.S. Peers, Oct. 13, 2021
- Keeping The Lights On: U.S. Utilities' Exposure To Physical Climate Risks, Sep. 16, 2021
- Updated Views On North American Utility Regulatory Jurisdictions - June 2021, June 29, 2021
- European Retailers Seek To Reopen Their Doors To Usher In The Post-Pandemic Recovery, June 29, 2021
- How Will Increasing Investor Focus On ESG Factors Affect North American Energy Companies?, June 28, 2021
- The Energy Transition: ESG Concerns Are Starting To Present Capital Market Challenges To North American Energy Companies, June 14, 2021
- The Health Care Credit Beat: U.S. Economic Recovery Doesn't Have To Follow Herd Immunity, June 11, 2021
- COVID-19 Heat Map: Pent-Up Demand And Supply Shortages Further Improve Recovery Prospects For Credit Quality, June 8, 2021
- For Investor-Owned Utilities, Winter Storm Uri Hasn't Yet Affected Our View Of Texas' Regulatory Framework, June 8, 2021
- Asia's Oil Giants Will Be Key To Global Climate Fight, June 7, 2021
- The Energy Transition: ESG Concerns Are Starting To Present Capital Market Challenges To North American Energy Companies, June 14, 2021
- Article Examines How California's Wildfire Risks Affect Utility Credit Quality, June 4, 2021
- The ESG Winds Of Change Could Become A Tempest For Global Oil And Gas Producers, June 2, 2021
- How ESG Factors Are Shaping North American Regulated Investor-Owned Utilities' Credit Quality, April 28 2021

Banks

- Climate Risk Vulnerability: Europe's Regulators Turn Up The Heat On Financial Institutions, Aug. 2, 2021
- Embedding Environmental Factors In Strategy And Risk Management: For Banks, A Long Journey Just Begun, Sept. 28, 2020

- The Greening Of Financial Services: Challenges For Bank And Insurance Green And Sustainability Hybrids, Aug. 12, 2020
- Islamic Finance And ESG: Sharia-Compliant Instruments Can Put The S In ESG, May 27, 2020
- Climate Change: Can Banks Weather The Effects?, Sept. 9, 2019

Insurance

- Global Reinsurers Grapple With Climate Change Risks, Sep. 23, 2021
- COVID-19 Highlights Global Insurance Protection Gap On Climate Change, Sept. 28, 2020
- COVID-19 Pushes Global Reinsurers Farther Out On Thin Ice; Sector Outlook Revised To Negative, May 18, 2020
- Sink Or Swim: The Importance Of Adaptation Projects Rises With Climate Risks, Dec. 3, 2019

Structured finance

- Sustainable Covered Bonds: A Primer, Nov. 17, 2021
- Credit FAQ: How Could Cyber Risks Affect Structured Finance Transactions?, Sept. 8, 2021
- ESG Industry Report Card: Auto Asset-Backed Securities, March 31, 2021
- ESG Industry Report Card: Collateralized Loan Obligations, March 31, 2021
- ESG Industry Report Card: Commercial Mortgage-Backed Securities, March 31, 2021
- ESG Industry Report Card: Credit Card Asset-Backed Securities, March 31, 2021
- ESG Industry Report Card: Residential Mortgage-Backed Securities, March 31, 2021
- ESG Industry Report Card: Student Loan Asset-Backed Securities, March 31, 2021

ESG In Credit Ratings Criteria-Related Commentaries

Cross-practice

- Environmental, Social, And Governance Principles in Credit Ratings, Oct. 10, 2021
- The Role Of Environmental, Social, And Governance Credit Factors In Our Ratings Analysis, Sept. 12, 2019

Sovereigns and local and regional governments

- How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions, Oct. 23, 2018

U.S. public finance

- Through the ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020
- When U.S. Public Finance Ratings Change, ESG Factors Are Often The Reason, March 28, 2019

Corporates and infrastructure

- How Management & Governance Risks and Opportunities Factor Into Global Corporate Ratings, Nov. 7, 2018
- How Social Risks And Opportunities Factor Into Global Corporate Ratings, April 11, 2018
- How Environmental And Climate Risks Factor Into Global Corporate Ratings, Oct. 21, 2015

- How ESG Factors Have Begun To Influence Our Project Finance Rating Outcomes, Jan. 27, 2020

Banks

- How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions, Oct. 23, 2018

Insurance

- How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions, Oct. 23, 2018

Structured finance

- ESG Credit Factors In Structured Finance, Sept. 19, 2019

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