

ESG Credit Indicator Report Card: Midstream Energy

August 29, 2023

(Editor's Note: S&P Global Ratings is no longer publishing or updating ESG credit indicators. See https://www.spglobal.com/_assets/documents/ratings/esg_credit_indicators_mr.pdf for more information.)

We are disclosing in this report our ESG credit indicators for the global midstream energy sector. Our ESG credit indicators provide additional disclosure and transparency at the entity level and reflect our opinion of the influence that environmental, social, and governance factors have on our credit rating analysis. They are applied after the credit rating has been determined. They are not a sustainability rating or an S&P Global Ratings ESG evaluation.

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Sector Snapshot – Midstream Energy

Most Influential ESG Factors



Climate transition risk

This is the most meaningful risk to midstream energy companies over the long-term. The industry's exposure to greenhouse gas emissions and the pace of the energy transition away from carbon-based fuels is the starting point of our environmental credit indicator industry assessment.



Social capital

Increased regulation and social activism towards oil and gas infrastructure is presenting challenges for new, large-scale projects.

The health and safety of workers and the communities this infrastructure serves is a key social consideration as accidents or spills could have a significant reputational or regulatory risk for companies.

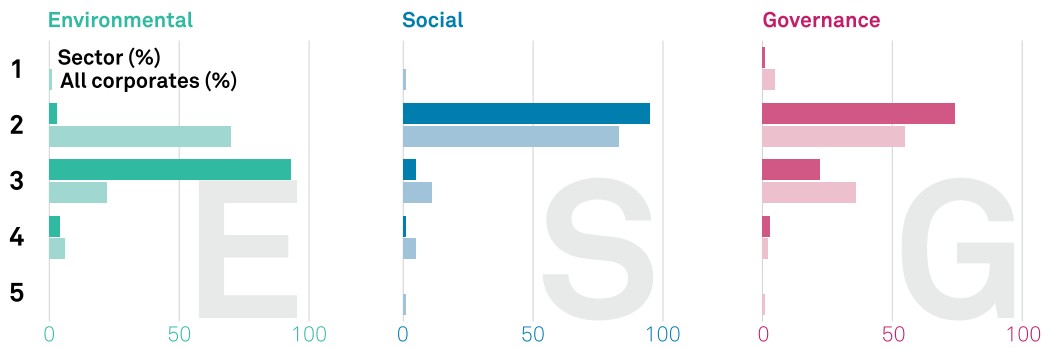


Governance structure

That about 22% of the issuers are controlled by private-equity firms negatively weighs on our assessment of governance structures and our credit ratings.

About 4% of the issuers operate in higher risk countries, where we see governance, institutional effectiveness, and the rule of law as being relatively weaker.

Distribution Of ESG Credit Indicators



1 = positive | 2 = neutral | 3 = moderately negative | 4 = negative | 5 = very negative.
 Our opinion of the influence of ESG factors on our credit rating analysis is reflected on a 1-5 scale. Source: S&P Global Ratings.
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Key Takeaways

- We view the midstream energy industry as having above-average environmental risk compared to other industry sectors.
- Climate transition risk is the most relevant environmental risk indicator to midstream energy companies over the long-term. We based our view on the industry's exposure to GHG emissions and the pace of the energy transition away from carbon-based fuels.
- The midstream industry's indirect exposure to other highly exposed sectors of the oil and gas value chain, including oil and gas production companies and downstream refining and gas-fired power generation, is also a key environmental risk factor.
- Social factors for the sector include the impact on communities, health and safety, and land use issues.
- Pollution risk includes emissions that contribute to global warming as well as high-impact, low-probability events such as severe oil spills, fires, and natural gas explosions.
- Governance factors are important, but we consider them on a case-by-case basis depending on the nature of each company's operating environment, organizational behavior, or ownership structure. A meaningful percentage of companies in the sector are owned by private equity or operate in relatively high-risk operating environments or sovereign nations.

Our ESG Credit Indicators

Table 1

Environmental Credit Indicators

Credit indicator	Definition
E-1	Environmental factors are, on a net basis*, a positive consideration in our credit rating analysis, affecting at least one analytical component§.
E-2	Environmental factors are, on a net basis*, a neutral consideration in our credit rating analysis.
E-3	Environmental factors are, on a net basis*, a moderately negative consideration in our credit rating analysis, affecting at least one analytical component§.
E-4	Environmental factors are, on a net basis*, a negative consideration in our credit rating analysis, affecting more than one analytical component§ or one severely.
E-5	Environmental factors are, on a net basis*, a very negative consideration in our credit rating analysis, affecting several analytical components§ or one very severely.

**On a net basis" means that we take a holistic view on exposure to environmental factors and related mitigants. §Analytical components include criteria scores and subscores (including the key analytical elements to assess them). "Affecting" means leading to a different outcome for an analytical component or lower/higher headroom for an analytical component.

In our ESG credit ratings criteria "Environmental, Social, And Governance Principles In Credit Ratings," Oct. 10, 2021, we articulate the principles that S&P Global Ratings applies to incorporate environmental, social, and governance (ESG) credit factors into its credit ratings analysis. In that

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criteria we define ESG credit factors as those ESG factors that can materially influence the creditworthiness of a rated entity or issue and for which we have sufficient visibility and certainty to include in our credit rating analysis. We note that when sufficiently material to affect our view of creditworthiness, ESG credit factors can influence credit ratings.

In our commentary "ESG Credit Indicator Definitions And Application," Oct. 13, 2021, we discuss the introduction of ESG credit indicators as a complement to our existing credit rating analysis. Whereas our ESG criteria seek to enhance transparency in how and where we capture ESG factors in credit ratings, our ESG credit indicators provide additional disclosure by reflecting our opinion of how material the influence (on a 1-5 scale) of ESG factors is on our credit rating analysis. We assess these indicators on a net basis, meaning that we take a holistic view of exposure to environmental, social and governance factors and related mitigants on the credit rating analysis. They are applied after the rating has been determined. They are not a sustainability rating or an S&P Global Ratings ESG evaluation.[1]

Accordingly, the application--or change--of an ESG credit indicator cannot in itself trigger a credit rating or outlook change. However, the impact of ESG factors on creditworthiness could contribute to a rating action, which in turn could lead to a change in the ESG credit indicator. Through the release of ESG credit indicators, we aim to further delineate and summarize the relevance of ESG factors to our credit analysis by isolating our opinion of their credit influence and separating it from the non-ESG factors affecting the credit rating.

The scale for environmental credit indicators is identical for social and governance credit indicators. It has a negative skew, which reflects our view that environmental, social and governance considerations (including risks outside of a company's control) have a negative influence more often than a positive one. An ESG credit indicator of E-2, S-2, or G-2 means that it is currently a neutral consideration in our credit rating analysis. This does not necessarily mean that ESG factors are not relevant, rather that they are currently not sufficiently material to alter the credit rating analysis or that positive ESG considerations are offset by ESG-related risks.

Also, entities may have identical ESG credit indicators, even if they diverge on ESG characteristics and performance. This may be the case because we only incorporate in our credit rating analysis those ESG factors that materially influence creditworthiness and for which we have sufficient visibility and certainty or because the differentiation in ESG characteristics is not in our view sufficiently material to warrant a different ESG credit indicator outcome.

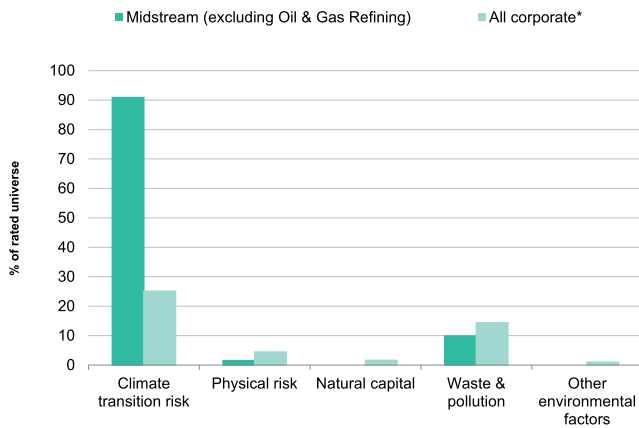
[1] ESG credit indicators are separate and distinct from S&P Global Ratings ESG evaluations. An S&P Global Ratings ESG evaluation is not a credit rating or component of our credit rating methodology. Rather, it indicates our view of an entity's relative exposure to observable ESG-related risks and opportunities, and our qualitative opinion of the entity's long-term sustainability and readiness for emerging trends and potential disruptions. Moreover, the ESG evaluation considers the impacts and dependencies on the environment and society across the value chain for a wide range of stakeholders, regardless of current credit materiality. (For more on ESG evaluations, see "Environmental, Social, And Governance Evaluation Analytical Approach," Dec. 15, 2020.)

Sector Overview

Environmental Credit Factors

Chart 1

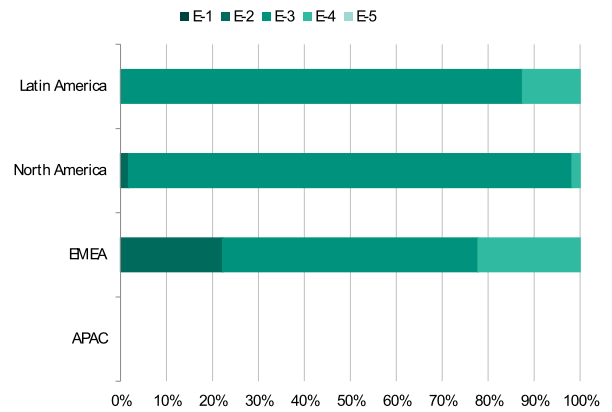
Key Environmental Factors Distribution



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Chart 2

Environmental Credit Indicators--Breakdown By Region



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Climate transition risk is the most meaningful risk to midstream energy companies over the long-term. The industry's exposure to greenhouse gas (GHG) emissions and the pace of the energy transition away from carbon-based fuels are key factors in our E-3 environmental indicator for the portfolio of globally rated companies. Midstream companies would have to derive the majority of their EBITDA from renewable or low-carbon sources to achieve an assessment of an E-2.

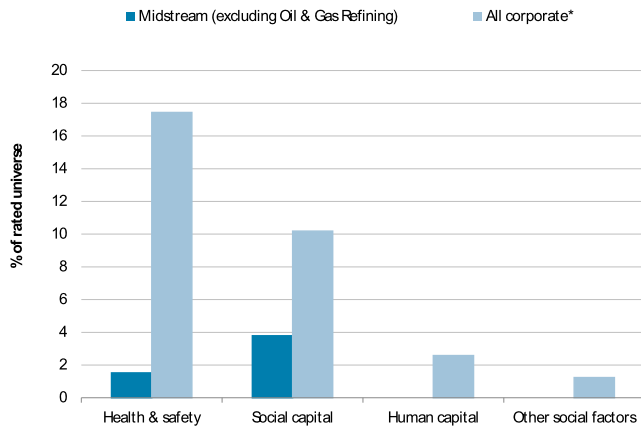
We assess environmental credit risks as above-average for the midstream energy sector, reflecting its status not only as an operator of infrastructure assets that transport, process, and store hydrocarbons but also its indirect exposure to other highly exposed sectors of the oil and gas value chain, including oil and gas production companies and downstream refining and gas-fired power generation. The midstream sector's inherent direct exposure primarily relates to pipeline spills, GHG emissions, contamination, and land use. Pollution is also a material event risk for companies transporting hydrocarbons.

We believe environmental regulations will become more of a headwind for traditional carbon-based energy, particularly as the transition to renewable sources accelerates globally. That said, the pace of the energy transition will likely take some time, and we think midstream infrastructure will remain a vital piece of the energy supply chain, with natural gas serving as a bridge fuel for global power generation and the heating of homes. The length of this bridge will depend on several factors, most notably the technology and economics of battery storage and, to a lesser extent, the regulatory landscape. The increased global focus on reducing GHG emissions that contribute to global warming and the COVID-19 pandemic will accelerate the timing of peak hydrocarbon demand. In our view, peak demand for crude oil-based fuels will likely occur sooner than for natural gas.

Social Credit Factors

Chart 3

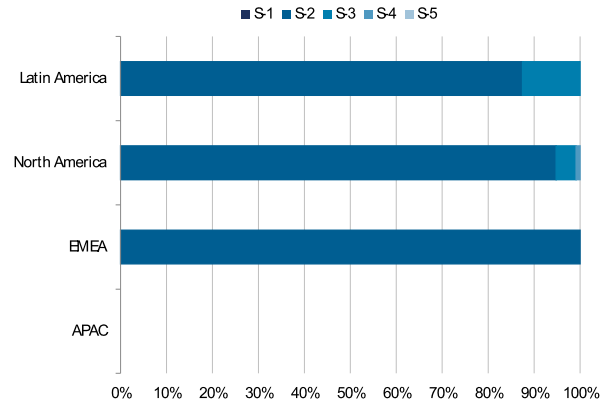
Key Social Factors Distribution



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Chart 4

Social Credit Indicators--Breakdown By Region



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Our social risk indicators reflect our view that social factors present a moderate but growing risk to midstream companies mainly due to the impact that large-scale infrastructure projects such as crude oil and natural gas pipelines may have on communities and land use. Safety management is an important consideration given the construction of sophisticated infrastructure like pipelines, storage terminals, and processing and fractionation assets, which handle volatile and toxic hydrocarbons that could have significant consequences for the health and safety of workers and the community. Companies in the sector typically track, manage, and report incidents (to the Occupational Safety and Health Administration or similar government agency) and have specific programs to educate their work forces.

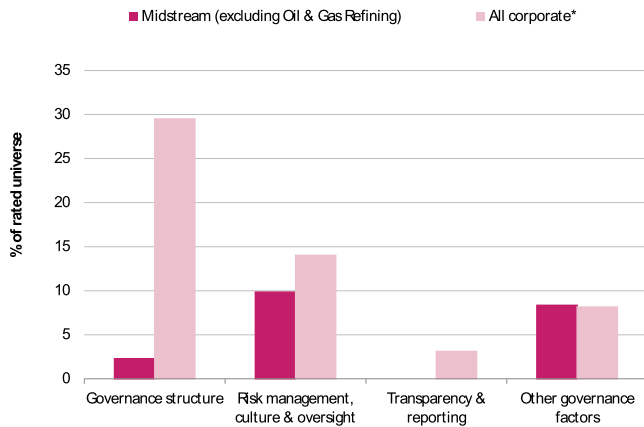
Regulators are increasingly focused on land use issues and resistant to granting permits for construction on rights-of-way for river crossings or through protected areas such as national parks and coastal waterways. This permitting risk is becoming more of a credit issue given the land use and disruptions that pipeline routes can create for local communities. In other regions, price affordability for the general public and a regulator's reluctance to increase tariffs could weigh on credit quality.

Environmental protests or legal challenges due to land use concerns, especially for pipelines under construction or placed into service in the last few years, have at times led to cancellations or substantial construction delays and higher costs. The most notable examples include challenges to TC Energy Corp.'s Keystone XL Pipeline, Dominion Energy's Atlantic Coast Pipeline, EQM Midstream Partners L.P.'s Mountain Valley Pipeline, Energy Transfer L.P.'s Dakota Access Pipeline (DAPL), and Canada's Trans Mountain Pipeline.

Governance Credit Factors

Chart 5

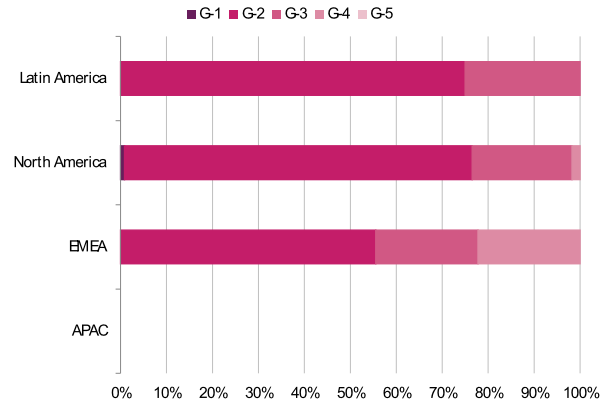
Key Governance Factors Distribution



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Chart 6

Governance Credit Indicators--Breakdown By Region



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Governance factors are assessed and indicators assigned for each company relative to our Management & Governance assessment for the issuer.

We believe concentration of governance indicators in the G-3 category for the sector is explained by the high level of entities being owned by private equity firms, which we believe is generally a moderately negative consideration for the credit analysis. Private equity-sponsored companies generally exhibit more aggressive financial policies and typically prioritize equity returns over the credit considerations of debtholders. We generally also view the master limited partnership and general partnership governance structure as having weaker board independence, including companies controlled by a family or an individual, and typically having more aggressive financial strategies as weighing on our assessment of governance.

Governance outcomes in the G-3 or G-4 categories may also reflect some geographic concentration of operations in higher risk countries, where we see governance, institutional effectiveness, and the rule of law as being relatively weaker.

ESG Credit Indicators By Issuer

Table 2

ESG Credit Indicators By Issuer For North America

Issuer	Credit indicator			ESG credit factors
	E	S	G	
AL NGPL Holdings LLC	E-3	S-2	G-2	Climate transition risks
AltaGas Ltd.	E-3	S-2	G-3	Climate transition risks; Risk management, culture, and oversight
Antero Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
Archrock Inc.	E-3	S-2	G-2	Climate transition risks
Aris Water Solutions	E-3	S-2	G-3	Climate transition risks; Governance structure
Associated Asphalt Partners LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
BCP Raptor II LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
BCP Renaissance Parent LLC	E-3	S-2	G-2	Climate transition risks
Blue Racer Midstream LLC	E-3	S-2	G-2	Waste and pollution; Climate transition risks
Boardwalk Pipeline Partners L.P.	E-3	S-2	G-2	Climate transition risks
Brazos Permian II LLC	E-3	S-2	G-2	Climate transition risks
Buckeye Partners L.P.	E-3	S-2	G-2	Climate transition risks
Centurion Pipeline Co. LLC	E-3	S-2	G-2	Climate transition risks
Cheniere Energy Inc.	E-3	S-2	G-2	Climate transition risks
Cheniere Energy Partners L.P.	E-3	S-2	G-2	Climate transition risks
CNX Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
Colonial Enterprises Inc.	E-3	S-2	G-2	Climate transition risks; Waste and pollution; Risk management, culture, and oversight
CQP Holdco LP	E-3	S-2	G-2	Climate transition risks
Crestwood Equity Partners L.P.	E-3	S-2	G-2	Climate transition risks
CSI Compressco L.P.	E-3	S-2	G-3	Climate transition risks; Governance structure
DCP Midstream L.P.	E-3	S-2	G-2	Climate transition risks
Delek Logistics Partners L.P.	E-3	S-2	G-2	Climate transition risks
Dominion Energy Questar Pipeline LLC	E-2	S-2	G-2	N/A
DT Midstream Inc.	E-3	S-2	G-2	Climate transition risk
EagleClaw Midstream Ventures LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Eastern Energy Gas Holdings LLC	E-3	S-2	G-2	Climate transition risks
Enable Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
Enbridge Inc.	E-3	S-3	G-2	Climate transition risks; Social capital
Energy Transfer L.P.	E-3	S-3	G-2	Climate transition risks; Waste and pollution; Social capital
Enlink Midstream LLC	E-3	S-2	G-2	Climate transition risks
Enterprise Products Partners L.P.	E-3	S-2	G-1	Climate transition risks; Risk management, culture, and oversight
Enviva Partners L.P.	E-2	S-2	G-3	Climate transition risks; Governance structure

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Table 2

ESG Credit Indicators By Issuer For North America (cont.)

Issuer	Credit indicator			ESG credit factors
	E	S	G	
Epic Crude Services L.P.	E-3	S-2	G-4	Climate transition risks; Risk management, culture, and oversight
Epic Y Grade Services L.P.	E-3	S-2	G-4	Climate transition risks; Risk management, culture, and oversight
Equitrans Midstream	E-3	S-3	G-2	Climate transition risks; Health and safety
Exterran Energy Solutions L.P.	E-3	S-2	G-2	Climate transition risks
Ferrellgas Partners L.P.	E-3	S-2	G-3	Climate transition risks; Governance structure
FLEX Intermediate HoldCo LLC	E-3	S-2	G-2	Climate transition risks
Florida Gas Transmission Co. LLC	E-3	S-2	G-2	Climate transition risks
FR BR Holdings LLC	E-3	S-2	G-2	Climate transition risks
Freeport LNG Investments, LLLP	E-3	S-2	G-2	Climate transition risks
Genesis Energy L.P.	E-3	S-2	G-3	Climate transition risks; Risk management, culture, and oversight; Governance structure
Gibson Energy Inc.	E-3	S-2	G-2	Climate transition risks; Waste and pollution
GIP II Blue Holding L.P.	E-3	S-2	G-2	Climate transition risks
GIP III Stetson I L.P.	E-3	S-2	G-2	Climate transition risks
Global Partners L.P.	E-3	S-2	G-2	Climate transition risks
Gray Oak Pipeline LLC	E-3	S-2	G-2	Climate transition risks
Great Lakes Gas Transmission L.P.	E-3	S-2	G-2	Climate transition risks
Gulf Finance LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Gulf South Pipeline Co. LLC	E-3	S-2	G-2	Climate transition risks
Gulfstream Natural Gas System LLC	E-3	S-2	G-2	Climate transition risks
Harvest Midstream I L.P.	E-3	S-2	G-2	Climate transition risks
Hess Midstream Operations L.P.	E-3	S-2	G-2	Climate transition risks
Holly Energy Partners L.P.	E-3	S-2	G-2	Climate transition risks
Inter Pipeline (Corridor) Inc.	E-3	S-4	G-2	Climate transition risks; Waste and pollution; Social capital
Inter Pipeline Ltd.	E-3	S-2	G-2	Climate transition risks; Waste and pollution
Iroquois Gas Transmission System L.P.	E-3	S-2	G-2	Climate transition risks
ITT Holdings LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Keyera Corp.	E-3	S-2	G-2	Climate transition risks
Kinder Morgan Inc.	E-3	S-2	G-2	Climate transition risks
LOOP LLC	E-3	S-2	G-2	Climate transition risks
Lucid Energy Group II Borrower LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Magellan Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
Martin Midstream Partners L.P.	E-3	S-2	G-3	Climate transition risks; Risk management, culture, and oversight
Medallion Gathering & Processing LLC	E-3	S-2	G-2	Climate transition risks
Midwest Connector Capital Co. LLC	E-3	S-3	G-2	Climate transition risks; Social capital
MPLX L.P.	E-3	S-2	G-2	Climate transition risks

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Table 2

ESG Credit Indicators By Issuer For North America (cont.)

Issuer	Credit indicator			ESG credit factors
	E	S	G	
Navitas Midstream Midland Basin LLC	E-3	S-2	G-3	Climate transition risks; ; Governance structure
New Fortress Energy Inc.	E-4	S-2	G-2	Climate transition risks
NGL Energy Partners L.P.	E-3	S-2	G-3	Climate transition risks; Risk management, culture, and oversight
NGPL PipeCo LLC	E-3	S-2	G-2	Climate transition risks
Northern Border Pipeline Co.	E-3	S-2	G-2	Climate transition risks
Northern Natural Gas Co.	E-3	S-2	G-2	Climate transition risks
Northriver Midstream Finance L.P.	E-3	S-2	G-2	Climate transition risks
NuStar Energy L.P.	E-3	S-2	G-2	Climate transition risks
Oasis Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
ONEOK Inc.	E-3	S-2	G-2	Climate transition risks
Oryx Midstream Services Permian Basin LLC	E-3	S-2	G-2	Climate transition risks
Paradigm Midstream LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
PBF Logistics L.P.	E-3	S-2	G-2	Climate transition risks
Pembina Pipeline Corp.	E-3	S-2	G-2	Climate transition risks
Phillips 66 Partners L.P.	E-3	S-2	G-2	Climate transition risks
Pipeline Funding Co. LLC	E-3	S-2	G-2	Climate transition risks
Plains All American Pipeline L.P.	E-3	S-2	G-2	Climate transition risks
Prairie ECI Acquiror L.P.	E-3	S-2	G-2	Climate transition risks
Rattler Midstream L.P.	E-3	S-2	G-2	Climate transition risks
Rockies Express Pipeline LLC	E-3	S-2	G-2	Climate transition risks
Rockpoint Gas Storage Partners L.P.	E-3	S-2	G-2	Climate transition risks
Ruby Pipeline LLC	E-3	S-2	G-3	Climate transition risk; Risk management, culture, and oversight
Sempra Infrastructure Partners L.P.	E-3	S-2	G-2	Climate transition risks
Southeast Supply Header LLC	E-3	S-2	G-2	Climate transition risks
Southern Natural Gas Co. LLC	E-3	S-2	G-2	Climate transition risks
Stonepeak Lonestar Holdings LLC	E-3	S-2	G-2	Climate transition risks; Waste and pollution
Suburban Propane Partners L.P.	E-3	S-2	G-2	Climate transition risks
Summit Midstream Partners L.P.	E-3	S-2	G-2	Climate transition risks
Sunoco L.P.	E-3	S-2	G-2	Climate transition risks
Superior Plus Corp.	E-3	S-2	G-2	Climate transition risks
Targa Resources Corp.	E-3	S-2	G-2	Climate transition risks
TC Energy Corp.	E-3	S-3	G-2	Climate transition risks; Social capital
Texas Gas Transmission LLC	E-3	S-2	G-2	Climate transition risks
Tidewater Midstream and Infrastructure Ltd.	E-3	S-2	G-2	Waste and pollution; Climate transition risks
Trans Quebec & Maritimes Pipeline Inc.	E-3	S-2	G-2	Climate transition risks; Waste and pollution

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Table 2

ESG Credit Indicators By Issuer For North America (cont.)

Issuer	Credit indicator			ESG credit factors
	E	S	G	
TransMontaigne Partners LLC and TransMontaigne Operating Company L.P.	E-3	S-2	G-3	Climate transition risks; Governance structure; Other governance factors
Traverse Midstream Partners LLC	E-3	S-2	G-2	Waste and pollution; Climate transition risks
USA Compression Partners L.P.	E-3	S-2	G-2	Climate transition risks
WaterBridge Operating LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Western Midstream Operating L.P.	E-3	S-2	G-2	Climate transition risks
Williams Cos. Inc. (The)	E-3	S-2	G-2	Climate transition risks
Woodford Express LLC	E-3	S-2	G-3	Climate transition risks; Governance structure
Zenith Energy U.S. Logistics Holdings LLC	E-3	S-2	G-3	Climate transition risks; Governance structure; Risk management, culture, and oversight

Table 3

ESG Credit Indicators By Issuer For Latin America

Issuer	Credit indicator			ESG credit factors
	E	S	G	
A.I. Candelaria Spain	E-3	S-2	G-2	Climate transition risks
EBT-Empresa Brasileira de Terminais e Armazens Gerais Ltda.	E-3	S-2	G-2	Climate transition risks
Infraestructura Energetica Nova S. A. B. de C. V.	E-3	S-2	G-2	Climate transition risks
GNL Quintero S.A.	E-4	S-2	G-2	Climate transition risks
Mex Gas Supply S.L.	E-4	S-2	G-2	Climate transition risks; Physical Risks
National Gas Co. of Trinidad & Tobago Ltd. (The)	E-3	S-2	G-3	Climate transition risks; Transparency and reporting
Oleoducto Central S.A. (OCENSA)	E-3	S-2	G-2	Climate transition risks
Transportadora de Gas del Peru S.A.	E-3	S-2	G-2	Climate transition risks
Transportadora de Gas del Sur S.A. (TGS)	E-3	S-3	G-3	Climate transition risks; Social capital; other governance factors

Table 4

ESG Credit Indicators By Issuer For Europe, The Middle East, And Africa

Issuer	Credit indicator			ESG credit factors
	E	S	G	
Alterra Infrastructure L.P.	E-4	S-2	G-3	Climate transition risks; risk management, culture, and oversight
Cullinan Holdco SCSp	E-3	S-2	G-3	Climate transition risks; risk management, culture, and oversight
GasTerra B.V.	E-4	S-2	G-2	Climate transition risks
KazTransGas	E-3	S-2	G-4	Climate transition risks; physical risks; other governance factors; risk management, culture, and oversight
KazTransOil	E-3	S-2	G-4	Climate transition risks; physical risks; other governance factors; risk management, culture, and oversight

Table 4

ESG Credit Indicators By Issuer For Europe, The Middle East, And Africa (cont.)

Issuer	Credit indicator			ESG credit factors
	E	S	G	
Rubis Terminal Infra SAS	E-3	S-2	G-2	Climate transition risks
Transneft PJSC	E-3	S-2	G-4	Climate transition risks; waste and pollution; governance structure; risk management, culture, and oversight

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