First Steps: Introducing ESG Issues in Midstream

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Summary

- Environment, social, and governance factors, or ESG, comprise the criteria used by investors in a holistic approach to analyze an investment. Formerly a niche concept, ESG has moved toward the mainstream of finance in recent years as a result of investor demand, regulatory influence, and demographics. Although not typically considered an ESG investment, the oil and gas industry is not immune to the shift toward ESG.
- The purpose of this white paper is to introduce ESG concepts and their implications for midstream. Several companies have taken steps to release an annual sustainability report containing information on how companies monitor and integrate ESG issues into their operations as well as long-term initiatives and goals. That said, the varied degree of transparency and relative lack of uniformity prevalent with the sector's ESG disclosures make comparison among companies more difficult. In addition, some companies do not provide any ESG disclosures.
- The growing investor interest in ESG is an opportunity for midstream companies to highlight some of the risk management and safety practices that have long been a priority in the space. The indirect benefits of ESG are plentiful, including greater anticipation of risks, increased investor engagement and transparency, and a public emphasis on important considerations like safety, which have typically been a more internal focus.
- This piece introduces ESG concepts and how they apply to the midstream space, examines metrics currently disclosed by companies, and recommends additional metrics that would provide greater transparency for investors.

Environment, social, and governance factors, or ESG, comprise the criteria used by investors in a holistic approach to analyze an investment. Formerly a niche concept, ESG has moved toward the mainstream of finance in recent years as a result of investor demand, regulatory influence, and demographics. With a focus on ESG gaining traction broadly among the investment community, discussions around ESG have also become more prevalent in the midstream space. The concept has received increased attention at recent industry conferences, and several companies have released sustainability reports highlighting ESG initiatives in the past year. The purpose of this white paper is to introduce ESG concepts and their implications for midstream. This piece discusses the current state of ESG within midstream, examining metrics currently disclosed by companies and recommending additional metrics that would provide greater transparency for investors.

ESG can be evaluated using a number of metrics, which can vary widely by industry and degree of disclosure. As a result, the analysis in this white paper is tailored specifically to midstream and the top 30 companies by weighting in the Alerian Midstream Energy Index (AMNA), excluding Plains GP Holdings (PAGP) to avoid redundancy given the inclusion of Plains All American (PAA). When considering the Environment category, midstream is primarily concerned with land management, biodiversity, limiting spills, investing in clean technology, and other ways of limiting its environmental impact. Social factors are those that impact stakeholders, namely issues such as workplace safety, diversity, and community engagement. Finally, Governance issues encompass the rights and responsibilities of a company and its shareholders and the alignment between shareholders, the board of directors, and management.

ESG is moving from a niche concept to the mainstream.

Formerly a niche concept, consideration of ESG and its inclusion in financial analysis has become more pervasive in recent years. ESG investing has grown significantly in assets under management (AUM) since 2005 when a frequently cited UN report suggested that companies who manage environment, social, and governance factors can potentially perform better by mitigating risks, anticipating and responding effectively to regulations, and operating sustainably. ESG issues can also impact intangibles like reputation and branding that matter for risk management and, increasingly, in the analysis of a potential investment. In general, the inclusion of ESG factors into the investment process has grown significantly in the past decade and is being driven by younger investors. The Global Sustainable Investment Alliance said in a 2018 report that ESG integration accounted for $17.5 trillion of investment dollars globally in 2018, up 69% from 2016. In the US, sustainable investing accounts for just over one-fourth of total managed assets.

In addition to growing AUM dedicated to ESG, demographics and increased regulations have played a part in the ESG space. In Europe, there has been a significant commitment to sustainable finance and ESG, with a push toward including ESG in multiple parts of the investment process through regulations. Both international investors and younger investors alike are increasingly interested in ESG investing and see it as a way to express values, which is a shift from how other generations have viewed investing. MSCI projected that millennials could invest $15 to $20 trillion in US ESG investments over the next 20 to 30 years. Even if investors merely incorporate ESG issues into a traditional investment analysis to provide a more holistic view of a company and assess certain risk factors, ESG and related areas such as sustainable investing will likely continue to grow.

Although not typically considered an ESG investment, the oil and gas industry is not immune to the shift toward ESG. As a vital piece of both the US and global economies, the energy sector cannot be ignored by investors, but energy companies, including midstream names, must also adapt to address the priorities of shareholders. The interest in ESG issues among investors and the industry was evident at the MLP and Energy Infrastructure Conference in May, which included a well-attended ESG panel. ESG came up as a topic in most of the company presentations, which is acknowledgement by the management teams present that ESG is becoming increasingly relevant to investors. Finally, the general increase in data disclosures by companies on ESG issues has made more in-depth analysis possible.

Midstream participation in ESG has been bifurcated.

In general, the amount of disclosure on ESG issues by midstream companies is bifurcated between companies that have provided detailed reports on the topic and companies that have hardly acknowledged ESG concerns. The varied degree of transparency and relative lack of uniformity prevalent with the sector's ESG disclosures make comparison among companies more difficult. However, several companies have taken steps to release an annual sustainability report containing information on how companies monitor and integrate ESG issues into their operations as well as long-term initiatives and goals. These reports also contain detailed data that was previously only tracked internally and not commonly disclosed. For example, companies may report greenhouse gas and carbon emissions from assets, total recordable incident rates, and detailed employee diversity data. So far this year alone, Crestwood Equity Partners (CEQP), Targa Resources (TRGP), and Williams (WMB) released their inaugural sustainability reports (see Appendix for full list). Other companies have not released full sustainability reports but have engaged with investors on ESG topics during investor days and have increased the amount of disclosures on their websites. Inclusion in broader indexes is another potential benefit to ESG efforts, with ONEOK (OKE) recently announcing that it has been included for the first time in the Dow Jones Sustainability North America Index.

For this paper, government data and company disclosures in SEC filings and on company websites were compiled and analyzed. For the more granular ESG disclosures, the data presented by midstream companies varied significantly. Some companies, especially those that have published sustainability reports, offered details including emissions data that are difficult or impossible to track without company disclosure. The degree of transparency with ESG metrics is one area for improvement among midstream companies, especially in the MLP space. Currently, CEQP is the only MLP to release a sustainability report, and while some large MLPs have taken steps to disclose ESG data, progress has been slow. MLP investors would benefit from greater transparency with ESG data and in other areas like project-level details that could be used to evaluate returns, for example. Over the past year, a portion of midstream has moved in the right direction to improve the availability of ESG data, but further participation is necessary.

ESG issues in midstream: Analyzing ESG data and trends

The section on the following page introduces each category of ESG and the primary ESG metrics being analyzed in the context of the midstream sector. For tables containing all of the metrics compiled, please refer to the Appendix. In addition, this section includes an evaluation of the current state of ESG in midstream and prescribes metrics that should be disclosed to provide more comprehensive information for midstream investors.

Environment: Operating effectively and managing environmental impact

While climate change may be the first environmental issue that comes to mind when ESG is mentioned, the Environment category comprises more than just greenhouse gas or carbon emissions. Environment includes operating effectively and encouraging best practices to minimize the impact on the environment. In general, carbon and greenhouse gas emissions issues are relatively less significant for midstream compared to other energy sectors given the containment of hydrocarbons within assets, with the exception being natural gas processing and fractionation of natural gas liquids. Instead, midstream companies are more concerned with preventing spills and addressing pipeline routing and land usage. Pipelines have been criticized by opposition groups as unsafe and hazardous to the environment, but extensive research has found the opposite to be true — pipelines are the safest mode of transportation for oil and natural gas. One study determined that crude transportation by rail was 4.5 times more likely to result in an accident than pipelines, and the majority of pipeline accidents occurred in facilities with secondary containment measures. Pipeline spills are expensive from a cleanup and regulatory standpoint and can cause significant damage to a company's reputation. As a result, companies have incentive to mitigate any spills through active monitoring of their assets and investment in technology that reduces risk.

In general, environmental data is not commonly reported by companies without a sustainability report, and there is little uniformity among the companies that do disclose environmental metrics. As a result, environmental metrics are mostly sourced from government data, such as Environmental Protection Agency (EPA) violations and related fines and Pipeline and Hazardous Materials Safety Administration (PHMSA) enforcement actions. Within sustainability reports, some companies highlighted qualitative issues like biodiversity. Midstream operations teams plan pipeline routes to mitigate risks to conservation projects or endangered species, working with government agencies and local communities to meet or exceed regulatory expectations. There is not a set industry benchmark for EPA violations or PHMSA enforcement actions, but these should be as close to zero as possible given the paramount importance of safety and environmental stewardship. The table on the following page includes PHMSA statistics since January 2015 for the top 30 AMNA constituents by weighting. PHMSA notices range from warning letter cases that do not result in actual violations to corrective action orders requiring immediate action by the company. The average number of probable violations[1] cases for the companies included was slightly over two per company in the period from January 2015 through August 2019. In general, one would expect companies with a more extensive asset base to have greater enforcement actions than smaller companies. Separately, for crude and refined products pipelines in general, the 5-year average accident rate per 1000 miles[2] was 0.72 according to PHMSA data. Despite an increase in pipeline miles, liquids pipeline incidents impacting people and the environment have fallen by 20% since 2014.

1 // Notices of Probable Violations (NOPVs) are an enforcement tool alleging specific regulatory violations and providing proposed corrective action through a compliance order or civil penalty. NOPVs typically follow routine inspections, incident investigations, or other oversight activity.
2 // Accident rate reflects incidents impacting people or the environment (IPE), which are accidents causing serious human or environmental consequences.

Alerian

Company Name	Ticker	Market Cap[1] (Billions USD)	Alerian Classification	PHMSA Enforcement Actions: Corrective Action Order	Notice of Probable Violations	Notice of Amendment Cases	Warning Letter Cases
Cheniere Energy	LNG	16.1	Liquefaction	0	1	1	1
Crestwood Equity Partners	CEQP	2.4	Gathering & Processing	0	0	3	1
DCP Midstream	DCP	3.3	Gathering & Processing	0	2	2	0
Enbridge	ENB CN	73.0	Pipeline Transportation | Petroleum	0	1	1	0
Energy Transfer	ET	33.5	Pipeline Transportation | Natural Gas	0	1	1	1
EnLink Midstream	ENLC	3.4	Gathering & Processing	0	1	1	1
Enterprise Products Partners	EPD	60.4	Pipeline Transportation | Natural Gas	2	7	4	2
EQM Midstream Partners	EQM	6.6	Pipeline Transportation | Natural Gas	0	0	0	0
Equitrans Midstream	ETRN	3.8	Pipeline Transportation | Natural Gas	0	0	1	0
Genesis Energy	GEL	2.6	Pipeline Transportation | Petroleum	0	3	0	2
Gibson Energy	GEI CN	2.5	Storage	0	0	0	0
Inter Pipeline	IPL CN	7.0	Pipeline Transportation | Petroleum	0	0	0	0
Keyera	KEY CN	4.9	Gathering & Processing	0	0	0	0
Kinder Morgan	KMI	45.3	Pipeline Transportation | Natural Gas	0	7	6	8
Macquarie Infrastructure	MIC	3.4	Storage	0	0	0	0
Magellan Midstream Partners	MMP	14.9	Pipeline Transportation | Petroleum	2	2	2	2
MPLX	MPLX	28.3	Gathering & Processing	1	1	0	1
NuStar Energy	NS	3.1	Pipeline Transportation | Petroleum	0	1	2	3
ONEOK	OKE	28.6	Gathering & Processing	0	2	2	3
Pembina Pipeline	PPL CN	18.3	Pipeline Transportation | Petroleum	0	0	0	0
Phillips 66 Partners	PSXP	12.4	Pipeline Transportation | Petroleum	0	4	3	6
Plains All American Pipeline	PAA	14.1	Pipeline Transportation | Petroleum	2	10	4	1
Shell Midstream Partners	SHLX	4.9	Pipeline Transportation | Petroleum	0	2	1	0
Tallgrass Energy	TGE	5.3	Pipeline Transportation | Petroleum	0	2	4	3
Targa Resources	TRGP	9.2	Gathering & Processing	0	1	3	1
TC Energy	TRP CN	48.0	Pipeline Transportation | Natural Gas	2	2	2	2
TC PipeLines	TCP	2.8	Pipeline Transportation | Natural Gas	-	-	-	-
Williams Companies	WMB	27.8	Gathering & Processing	0	8	4	1
Western Midstream	WES	10.3	Gathering & Processing	0	2	2	1

Note: PHMSA notices range from warning letter cases that do not result in actual violations to corrective action orders requiring immediate action by the company.
Data reflects time period from January 2015 to August 2019
[1] Source: Bloomberg as of October 18, 2019
Source: PHMSA

Social: Managing relationships with employees and the community

The Social category of ESG refers to how a company manages its relationships with its employees and the community. Social includes issues such as diversity, workplace safety, community engagement, and the pay gap within a company. Across energy, safety has been and will remain a priority for every company. Many midstream companies begin every meeting with a safety-related discussion, which could cover anything from a review of procedures to a talk on how to prepare for contingency events. These safety discussions provide an opportunity for every employee to get into the mindset of operating safely, which is paramount when handling and processing hydrocarbons. Companies are also constantly reviewing safety training and drills for the sake of their employees and to ensure compliance with regulations. Companies disclosed varying metrics for safety, including safety training hours and the number of safety courses, exercises, and drills undertaken by employees during a given year. Notably, several Canadian companies were among a small group who disclosed the number of safety exercises and drills performed each year (see Appendix). In addition, Occupational Safety and Health Administration (OSHA) fines were compiled from January 2015 to August 2019. While individual companies may report their own workplace safety metrics, OSHA data was used for comparability purposes. The table includes the dollar amounts of initial penalties assessed by OSHA and current penalties, which may be reduced as a result of judicial actions or settlements.

			OSHA Penalties	
Company Name	**Ticker**	**Market Cap[1] (Billions USD)**	**Initial Penalty (USD)**	**Current Penalty (USD)**
Cheniere Energy	LNG	16.1	-	-
Crestwood Equity Partners	CEQP	2.4	-	-
DCP Midstream	DCP	3.3	131,407	55,400
Enbridge	ENB CN	73.0	5,174	4,200
Energy Transfer	ET	33.5	37,382	31,606
EnLink Midstream	ENLC	3.4	23,282	-
Enterprise Products Partners	EPD	60.4	55,308	49,530
EQM Midstream Partners	EQM	6.6	-	-
Equitrans Midstream	ETRN	3.8	-	-
Genesis Energy	GEL	2.6	-	-
Gibson Energy	GEI CN	2.5	-	-
Inter Pipeline	IPL CN	7.0	-	-
Keyera	KEY CN	4.9	-	-
Kinder Morgan	KMI	45.3	60,855	32,638
Macquarie Infrastructure	MIC	3.4	-	-
Magellan Midstream Partners	MMP	14.9	9,900	4,950
MPLX	MPLX	28.3	-	-
NuStar Energy	NS	3.1	5,000	-
ONEOK	OKE	28.6	12,600	10,000
Pembina Pipeline	PPL CN	18.3	-	-
Phillips 66 Partners	PSXP	12.4	25,000	25,000
Plains All American Pipeline	PAA	14.1	6,750	-
Shell Midstream Partners	SHLX	4.9	-	-
Tallgrass Energy	TGE	5.3	-	-
Targa Resources	TRGP	9.2	9,000	5,400
TC Energy	TRP CN	48.0	-	-
TC PipeLines	TCP	2.8	-	-
Williams Companies	WMB	27.8	7,000	7,000
Western Midstream	WES	10.3	-	-

Note: Initial penalties are fines assessed by OSHA. Current penalties reflect any fine reduction as a result of judicial actions or settlements.
Data reflects time period from January 2015 to August 2019
[1] Source: Bloomberg as of October 18, 2019
Source: OSHA

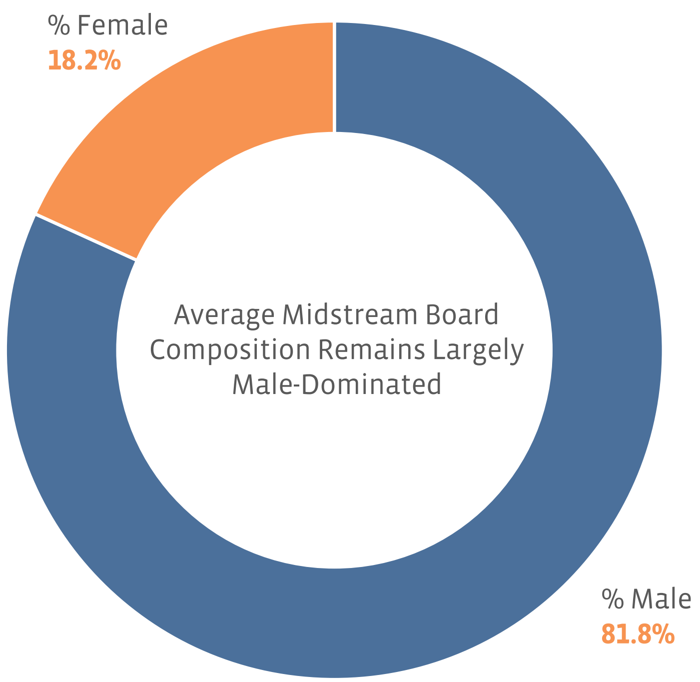
In addition to safety, the Social category also encompasses metrics like board diversity and the intra-corporate pay gap. These two metrics that have drawn greater interest in recent years. In August 2015, the Securities and Exchange Commission (SEC) implemented a rule requiring most public companies meeting certain size and other requirements to disclose the ratio of CEO pay to the pay of the median employee, with companies allowed some flexibility in determining how the ratio is calculated. The mandated disclosure of pay ratios has increased transparency in executive compensation and reveals what the median employee is paid at each company. Among the companies analyzed that reported their pay ratio, the median salary of the median employee was $111,341. At a glance, pay ratios for the midstream space compare favorably on a relative basis to other industries. Per a 2018 report, midstream would rank among the industries with the lowest pay gaps with a median of approximately 67 to 1 and slightly below broader energy at 72 to 1. For context, sectors such as health care and financial services typically have ratios of 150 to 1, given the high number of low-paid employees. The table below includes the ratios between the highest paid executive[3] and the median employee disclosed in each company's annual report.

Company	Ticker	Total Compensation – Highest Paid Executive	Median Employee Compensation	Ratio of Highest Paid Executive to Median
Cheniere Energy	LNG	$21,266,901	$183,131	116:1
Crestwood Equity Partners	CEQP	$6,009,599	$87,053	69:1
DCP Midstream	DCP	$4,247,265	$102,450	41:1
Enbridge	ENB CN	$9,530,194	$111,341	86:1
Energy Transfer	ET	$10,780,120	$115,908	93:1
EnLink Midstream	ENLC	$10,358,211	$161,739	64:1
Enterprise Products Partners	EPD	$7,697,938	$106,380	72:1
EQM Midstream Partners	EQM	$6,187,573	-	-
Equitrans Midstream	ETRN	$3,685,479	-	-
Genesis Energy	GEL	$1,450,934	$118,176	12:1
Gibson Energy	GEI CN	$3,702,224	-	-
Inter Pipeline	IPL CN	$2,880,889	-	-
Keyera	KEY CN	$2,830,425	-	-
Kinder Morgan	KMI	$16,908,961	$106,850	158:1
Macquarie Infrastructure	MIC	$1,151,280	$48,641	24:1
Magellan Midstream Partners	MMP	$5,276,944	$142,770	37:1
MPLX	MPLX	$5,245,712	-	-
NuStar Energy	NS	$3,501,130	$109,683	32:1
ONEOK	OKE	$7,099,869	$130,481	54:1
Pembina Pipeline	PPL CN	$5,221,467	-	-
Phillips 66 Partners	PSXP	$1,413,730	-	-
Plains All American Pipeline	PAA	$8,892,983	$115,100	77:1
Shell Midstream Partners	SHLX	-	-	-
Tallgrass Energy	TGE	$4,647,014	$96,979	48:1
Targa Resources	TRGP	$13,481,602	$102,427	132:1
TC Energy	TRP CN	$9,154,255	-	-
TC PipeLines	TCP	-	-	-
Williams Companies	WMB	$10,691,376	$122,742	87:1
Western Midstream	WES	$3,253,413	-	27:1

Source: Company Reports

3 // For consistency purposes, we used the highest paid executive disclosed in company reports to determine the pay ratio rather than the CEO alone.

Board diversity and independence is another Social issue that has been in focus. For the purposes of this paper, board diversity refers to the composition of the board by gender (although other factors can be considered), and independent board members are defined as those that do not have a position within the company. Midstream boards of directors are mostly composed of male members, with 81.8% of midstream boards represented by the AMNA top 30 being male. All six Canadian companies finished in the top ten of the analysis in terms of gender diversity on their boards, with each company having at least 25% female members. Enbridge (ENB CN) led the constituents with a nearly even split of male and female members.



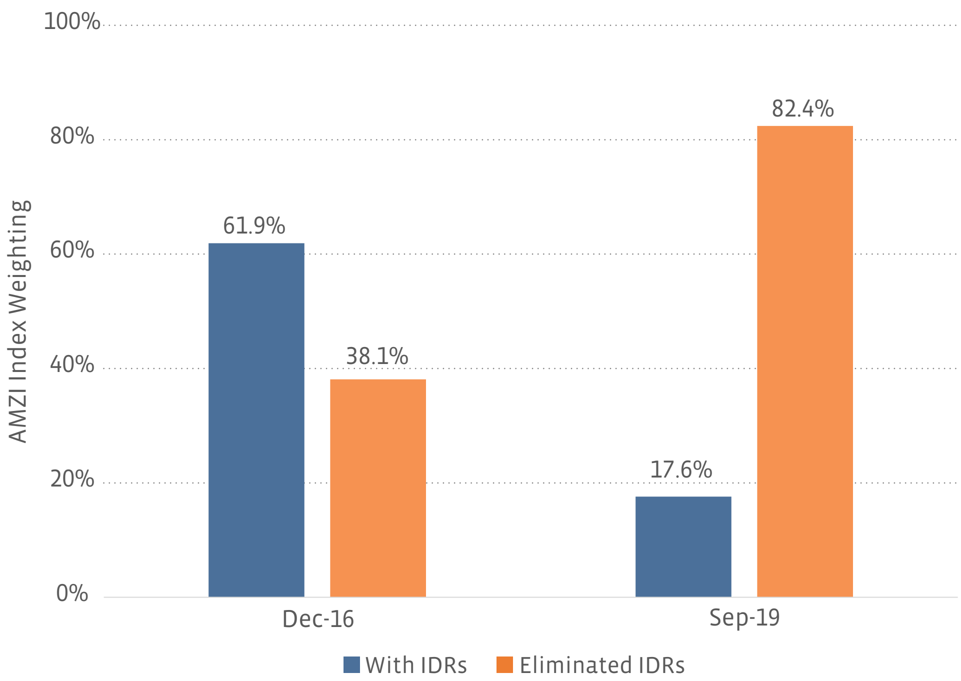
Source: Company Reports
Average board composition calculated using the gender composition of the boards of directors of the top 30 AMNA constituents by weighting

For many midstream companies, community engagement is an important piece of company culture, and most companies touted accomplishments related to charitable work and monetary donations. Given the public nature of some energy infrastructure projects, community engagement also includes how companies communicate with landowners, local governments, native people groups, and the general public. While these elements of the Social category are difficult to quantify, they remain an important part of the outreach performed by midstream companies. The Appendix includes a listing of companies that disclosed donations or community initiatives in 2018.

Governance: Company oversight and aligning interests

Governance is defined as the actions taken by management and the board of directors to ensure accountability, fairness, and transparency in a company's relationship with its stakeholders. Rather than simply meeting regulatory or stock exchange requirements, effective corporate governance involves taking active steps to align executive and shareholder interests through consideration of economic interests, board independence, and shareholder voting rights. Historically, for MLPs, incentive distribution rights (IDRs) have been detrimental to governance and therefore a concern for investors. Although the initial goal of IDRs was to align the interests of the MLP and its general partner (GP) early in the life of the partnership, the structure lacks sustainability as the MLP matures and IDRs become a burden on cost of equity. Additionally, elimination of IDRs can better align the financial interests of the GP and individual unitholders by increasing the parent's ownership in the MLP and by putting the two groups on equal footing regarding distributions. Only three of the top 30 AMNA constituents, Shell Midstream Partners (SHLX), DCP Midstream (DCP), and TC PipeLines (TCP) still possess IDRs. Looking at just MLPs, 82% of the constituents of the Alerian MLP Infrastructure Index (AMZI) by weight as of the September 2019 quarterly rebalancing have eliminated their IDRs compared to 38% at end of 2016. The widespread elimination of IDRs is the best example of improving corporate governance in the MLP space.

The Majority of AMZI Constituents Have Eliminated IDRs



Source: Company Reports as of 9/30/19
Index weightings as of the September 2019 quarterly rebalancing

The table on the following page displays different corporate governance metrics for the top 30 constituents of the AMNA. While MLP unitholders typically do not have the right to vote in board elections, there are a few exceptions to the rule. Common unitholders of Magellan Midstream Partners (MMP) and NuStar Energy (NS) are allowed to vote for members of the board. PAA unitholders can also vote for seven members of the board of directors, but the remaining six are designated or appointed by the GP. A board of directors with a high percentage of independent directors is positive for corporate governance; recent research suggests that board diversity and independence can improve governance by providing different viewpoints and expertise to key decisions. The average midstream board of directors based on the top 30 AMNA constituents is made up of nearly 70% independent directors. Out of 30 boards, seven MLP boards consist of less than 50% independent directors.

In addition to unitholder voting rights and board independence, skin in the game is a metric within Governance focused on alignment between executives and equity owners. Skin in the game measures insider ownership of common units as a percentage of total shares outstanding. Average insider ownership is a low 2.1% for the top 30 AMNA constituents, but insiders of two midstream operators – Energy Transfer (ET) and Kinder Morgan (KMI) – own more than 10% of outstanding units/shares. Executive compensation is often discussed in tandem with skin in the game. Executive compensation should align the interests of company management with those of shareholders. Additionally, executive compensation should not be tied too much to a single metric such as distribution growth.

Company	Ticker	Ability to Vote Board Members	Skin in the Game[1]	IDRs	Board Independence	Sustainability Report
Cheniere Energy	LNG	Yes	0.6%	-	55%	-
Crestwood Equity Partners	CEQP	No	6.3%	-	67%	Yes
DCP Midstream	DCP	No	0.1%	Yes	80%	-
Enbridge	ENB CN	Yes	0.2%	-	73%	Yes
Energy Transfer	ET	No	13.8%	-	30%	-
EnLink Midstream	ENLC	No	0.7%	-	33%	-
Enterprise Products Partners	EPD	No	0.3%	-	56%	-
EQM Midstream Partners	EQM	No	0.0%	-	43%	-
Equitrans Midstream	ETRN	Yes	0.0%	-	71%	-
Genesis Energy	GEL	No	8.9%	-	100%	-
Gibson Energy	GEI CN	Yes	0.3%	-	88%	-
Inter Pipeline	IPL CN	Yes	0.3%	-	90%	Yes
Keyera	KEY CN	Yes	1.1%	-	78%	-
Kinder Morgan	KMI	Yes	14.0%	-	75%	Yes
Macquarie Infrastructure	MIC	Yes	0.2%	-	78%	Yes
Magellan Midstream Partners	MMP	Yes	0.3%	-	89%	-
MPLX	MPLX	No	0.2%	-	57%	-
NuStar Energy	NS	Yes	7.4%	-	89%	-
ONEOK	OKE	Yes	0.6%	-	64%	Yes
Pembina Pipeline	PPL CN	Yes	0.2%	-	82%	Yes
Phillips 66 Partners	PSXP	No	0.1%	-	43%	-
Plains All American Pipeline	PAA	Mixed[2]	0.6%	-	69%	-
Shell Midstream Partners	SHLX	No	0.0%	Yes	33%	-
Tallgrass Energy	TGE	No	2.0%	-	44%	-
Targa Resources	TRGP	Yes	1.9%	-	70%	Yes
TC Energy	TRP CN	Yes	0.1%	-	92%	-
TC PipeLines	TCP	No	0.1%	Yes	43%	-
Williams Companies	WMB	Yes	0.1%	-	92%	Yes
Western Midstream Partners	WES	No	0.1%	-	75%	-

[1] Skin in the Game measures insider ownership of common units as a percentage of total shares outstanding.
[2] Unitholders vote for seven members of the board of directors, but the remaining six are designated or appointed by the GP
Source: Company Reports

Where does midstream go from here?

As interest among generalists and international investors alike continues to increase for ESG, the onus will be on midstream management teams to increase the information provided to allow for thoughtful decisions by investors. In many cases, midstream companies may already have extensive ESG data available as a result of risk management and monitoring practices, and the burden rests mostly in packaging this data into a report. For companies that have already released sustainability reports, one challenge for investor analysis has been the variety of metrics used by each company. Because not every aspect of ESG is quantifiable, one management team may prefer to measure a factor a certain way, while a different management team prefers another standard. Eventually, the ideal would be a midstream space with uniform metrics that allow for efficient comparability between companies, but investors would likely settle for simply having more data available in any form.

In a review of the data available from companies, significant gaps and inconsistencies exist in what was disclosed. For example, in the Environment category, disclosure of environmental metrics by companies varies between limited or no information to granular data in sustainability reports that includes details on emissions profiles, spills, and other environmental compliance information. Sustainability reports included additional commentary on biodiversity, pipeline routing, and water management, among other topics. The difference is clear for companies that currently lag on ESG reporting, and those companies should make a conscious effort to make more data and information available as a next step. After making sustainability reports an industry standard, there are a few key environmental and social metrics that midstream companies should prioritize in reporting, which were listed with comments below. ESG reporting should not stop with the metrics prescribed in this paper; energy infrastructure companies should report any metrics that would give investors a clearer picture of how the entity operates. It is also important to note that ESG goes beyond environmental, safety, and social reporting. Governance issues are just as important as environmental and social issues, if not more so as far as shareholders are concerned. Bringing these issues into focus could also help bring about an improvement in how investors view the industry in general.

Total Recordable Incident Rates	• Helps to quantify a company's ability to operate safely • Common metric in sustainability reports
Greenhouse Gas Emissions	• Directly measures a company's environmental impact • Common metric in sustainability reports, especially in regard to methane emissions
Number and Volume of Significant Spills	• Highlights both a company's ability to operate safely and environmental impact • Some companies disclose total reportable spills
Total Employee Training Hours Per Employee	• Quantifies a company's commitment to employee safety • Currently included in some sustainability reports
Workplace Diversity	• Demonstrates a company's commitment to diversity • Often discussed, but metrics are rarely disclosed
Board Independence/Diversity	• Board independence is critical to objectivity and shareholder-friendly practices • Board diversity is an important part of a company's commitment to diversity • Both metrics should be readily available in ESG/sustainability reports
Management Compensation	• One of the most important pieces of governance reporting • Management compensation should be tied to shareholder returns and disclosed clearly • Ratio of highest paid executive to median employee salary should be reported

Conclusion

The growing investor interest in ESG is an opportunity for midstream companies to highlight some of the risk management and safety practices that have long been a priority in the space. The indirect benefits of ESG are plentiful, including greater anticipation of risks, increased investor engagement and transparency, and a public emphasis on important priorities like safety, which have typically been a more internal focus. Greater transparency and engagement on ESG issues may increase investor comfort that management is considering risks and opportunities appropriately. Going forward, the steps for midstream companies should be to first make an effort to listen and engage on issues important to investors, increase disclosure of ESG metrics, including releasing a sustainability report, and promote uniformity and transparency on ESG data.

// Appendix A – Environment

		EPA Enforcement Actions		
Company Name	**Ticker**	**Total Fines**	**Total SEP Cost**	**Total Compliance Action Cost**
Cheniere Energy	LNG	-	-	-
Crestwood Equity Partners	CEQP	-	-	-
DCP Midstream	DCP	142,025	-	697,175
Enbridge	ENB CN	62,001,440	-	5,438,222
Energy Transfer	ET	-	-	-
EnLink Midstream	ENLC	40,741	-	1,663,825
Enterprise Products Partners	EPD	468,215	31,344	16,000
EQM Midstream Partners	EQM	-	-	-
Equitrans Midstream	ETRN	-	-	-
Genesis Energy	GEL	1,200	-	1,500
Gibson Energy	GEI CN	2,594,010	-	-
Inter Pipeline	IPL CN	-	-	-
Keyera	KEY CN	-	-	-
Kinder Morgan	KMI	921,099	387,500	152,200
Macquarie Infrastructure	MIC	-	-	-
Magellan Midstream Partners	MMP	3,177,528	-	8,000,000
MPLX	MPLX	231,250	385,000	1,034,200
NuStar Energy	NS	-	-	-
ONEOK	OKE	9,950	31,870	51,421
Pembina Pipeline	PPL CN	-	-	-
Phillips 66 Partners	PSXP	-	-	-
Plains All American Pipeline	PAA	-	-	-
Shell Midstream Partners	SHLX	250,590	-	353,750
Tallgrass Energy	TGE	118,250	-	-
Targa Resources	TRGP	220,000	-	10,000
TC Energy	TRP CN	-	-	-
TC PipeLines	TCP	-	-	-
Williams Companies	WMB	-	-	404,000
Western Midstream	WES	-	-	-

Note: SEP refers to Supplemental Environmental Projects that may be proposed in addition to settlement agreements.
Data reflects time period from 2015 to August 2019
Source: EPA

// Appendix A – Environment (Continued)

Company Name	Ticker	Environmental Committee
Cheniere Energy	LNG	No
Crestwood Equity Partners	CEQP	Yes
DCP Midstream	DCP	No
Enbridge	ENB CN	Yes
Energy Transfer	ET	No
EnLink Midstream	ENLC	Yes
Enterprise Products Partners	EPD	Yes
EQM Midstream Partners	EQM	Yes
Equitrans Midstream	ETRN	Yes
Genesis Energy	GEL	No
Gibson Energy	GEI CN	Yes
Inter Pipeline	IPL CN	Yes
Keyera	KEY CN	Yes
Kinder Morgan	KMI	Yes
Macquarie Infrastructure	MIC	No
Magellan Midstream Partners	MMP	No
MPLX	MPLX	No
NuStar Energy	NS	No
ONEOK	OKE	Yes
Pembina Pipeline	PPL CN	Yes
Phillips 66 Partners	PSXP	No
Plains All American Pipeline	PAA	No
Shell Midstream Partners	SHLX	No
Tallgrass Energy	TGE	No
Targa Resources	TRGP	No
TC Energy	TRP CN	Yes
TC PipeLines	TCP	No
Williams Companies	WMB	Yes
Western Midstream	WES	No

Source: Company Reports and Websites

// Appendix B – Social

Company Name	Ticker	Number of Safety Exercises/Courses/ Drills	Safety Training Hours
Crestwood Equity Partners	CEQP	22[1]	19,167
Enbridge	ENB CN	315	-
Enterprise Products Partners	EPD	658	317,000
EQM Midstream Partners	EQM	-	7,500
Gibson Energy	GEI CN	144	-
Inter Pipeline	IPL CN	50	-
Kinder Morgan	KMI	-	187,204
Plains All American Pipeline	PAA	100[1]	-
Western Midstream	WES	3,321	-

[1] Annual emergency response training exercises
Source: Company Reports and Websites

Company Name	Ticker	Donations (MM USD)	Community Initiative Program
Cheniere Energy	LNG	3.5	Yes
Crestwood Equity Partners	CEQP	5.0	Yes
DCP Midstream	DCP	3.0	Yes
Enbridge	ENB CN	16.5	Yes
Energy Transfer	ET	39.0	Yes
EnLink Midstream	ENLC[1]	-	Yes
Enterprise Products Partners	EPD	5.0	Yes
EQM Midstream Partners	EQM	-	Yes
Equitrans Midstream	ETRN	-	Yes
Genesis Energy	GEL	-	No
Gibson Energy	GEI CN	0.6	Yes
Inter Pipeline	IPL CN	2.8	Yes
Keyera	KEY CN	1.0	Yes
Kinder Morgan	KMI	1.0	Yes
Macquarie Infrastructure	MIC	330.0	Yes
Magellan Midstream Partners	MMP	4.0	Yes
MPLX	MPLX	-	No
NuStar Energy	NS	45.0	Yes
ONEOK	OKE	-	Yes
Pembina Pipeline	PPL CN	-	Yes
Phillips 66 Partners	PSXP	-	No
Plains All American Pipeline	PAA	1.2	Yes
Shell Midstream Partners	SHLX	-	No
Tallgrass Energy	TGE	-	No
Targa Resources	TRGP	-	Yes
TC Energy	TRP CN	-	Yes
TC PipeLines	TCP	-	No
Williams Companies	WMB	-	Yes
Western Midstream	WES	19.3	Yes

Note: Donation numbers are from company websites and sustainability reports and may not reflect the total donations of a constituent.
[1] ENLC reported a $0.3 MM donation to fight heart disease and stroke but did not publicly disclose its total donation amount.
Source: Company Reports and Websites

// Appendix B – Social (Continued)

			OSHA Penalties	
Company Name	**Ticker**	**Market Cap[1] (Billions USD)**	**Initial Penalty (USD)**	**Current Penalty (USD)**
Cheniere Energy	LNG	16.1	-	-
Crestwood Equity Partners	CEQP	2.4	-	-
DCP Midstream	DCP	3.3	131,407	55,400
Enbridge	ENB CN	73.0	5,174	4,200
Energy Transfer	ET	33.5	37,382	31,606
EnLink Midstream	ENLC	3.4	23,282	-
Enterprise Products Partners	EPD	60.4	55,308	49,530
EQM Midstream Partners	EQM	6.6	-	-
Equitrans Midstream	ETRN	3.8	-	-
Genesis Energy	GEL	2.6	-	-
Gibson Energy	GEI CN	2.5	-	-
Inter Pipeline	IPL CN	7.0	-	-
Keyera	KEY CN	4.9	-	-
Kinder Morgan	KMI	45.3	60,855	32,638
Macquarie Infrastructure	MIC	3.4	-	-
Magellan Midstream Partners	MMP	14.9	9,900	4,950
MPLX	MPLX	28.3	-	-
NuStar Energy	NS	3.1	5,000	-
ONEOK	OKE	28.6	12,600	10,000
Pembina Pipeline	PPL CN	18.3	-	-
Phillips 66 Partners	PSXP	12.4	25,000	25,000
Plains All American Pipeline	PAA	14.1	6,750	-
Shell Midstream Partners	SHLX	4.9	-	-
Tallgrass Energy	TGE	5.3	-	-
Targa Resources	TRGP	9.2	9,000	5,400
TC Energy	TRP CN	48.0	-	-
TC PipeLines	TCP	2.8	-	-
Williams Companies	WMB	27.8	7,000	7,000
Western Midstream	WES	10.3	-	-

Note: Initial penalties are fines assessed by OSHA. Current penalties reflect any fine reduction as a result of judicial actions or settlements. Data reflects time period from January 2015 to August 2019
[1] Source: Bloomberg as of October 18, 2019
Source: OSHA

// Appendix B – Social (Continued)

Company Name	Ticker	Male Members	Female Members	Total	% Male	% Female
Cheniere Energy	LNG	8	3	11	73%	27%
Crestwood Equity Partners	CEQP	8	1	9	89%	11%
DCP Midstream	DCP	5	0	5	100%	0%
Enbridge	ENB CN	6	5	11	55%	45%
Energy Transfer	ET	9	1	10	90%	10%
EnLink Midstream	ENLC	9	0	9	100%	0%
Enterprise Products Partners	EPD	14	2	16	88%	13%
EQM Midstream Partners	EQM	5	2	7	71%	29%
Equitrans Midstream	ETRN	5	2	7	71%	29%
Genesis Energy	GEL	6	1	7	86%	14%
Gibson Energy	GEI CN	6	2	8	75%	25%
Inter Pipeline	IPL CN	7	3	10	70%	30%
Keyera	KEY CN	6	3	9	67%	33%
Kinder Morgan	KMI	14	2	16	88%	13%
Macquarie Infrastructure	MIC	6	3	9	67%	33%
Magellan Midstream Partners	MMP	7	2	9	78%	22%
MPLX	MPLX	13	1	14	93%	7%
NuStar Energy	NS	8	1	9	89%	11%
ONEOK	OKE	9	2	11	82%	18%
Pembina Pipeline	PPL CN	8	3	11	73%	27%
Phillips 66 Partners	PSXP	7	0	7	100%	0%
Plains All American Pipeline	PAA	12	1	13	92%	8%
Shell Midstream Partners	SHLX	7	2	9	78%	22%
Tallgrass Energy	TGE	9	0	9	100%	0%
Targa Resources	TRGP	8	2	10	80%	20%
TC Energy	TRP CN	9	3	12	75%	25%
TC PipeLines	TCP	6	1	7	86%	14%
Williams Companies	WMB	10	3	13	77%	23%
Western Midstream	WES	10	2	12	83%	17%

Source: Company Reports

// Appendix C – Governance

Company	Ticker	Ability to Vote Board Members	Skin in the Game[1]	IDRs	Board Independence	Sustainability Report
Cheniere Energy	LNG	Yes	0.6%	-	55%	-
Crestwood Equity Partners	CEQP	No	6.3%	-	67%	Yes
DCP Midstream	DCP	No	0.1%	Yes	80%	-
Enbridge	ENB CN	Yes	0.2%	-	73%	Yes
Energy Transfer	ET	No	13.8%	-	30%	-
EnLink Midstream	ENLC	No	0.7%	-	33%	-
Enterprise Products Partners	EPD	No	0.3%	-	56%	-
EQM Midstream Partners	EQM	No	0.0%	-	43%	-
Equitrans Midstream	ETRN	Yes	0.0%	-	71%	-
Genesis Energy	GEL	No	8.9%	-	100%	-
Gibson Energy	GEI CN	Yes	0.3%	-	88%	-
Inter Pipeline	IPL CN	Yes	0.3%	-	90%	Yes
Keyera	KEY CN	Yes	1.1%	-	78%	-
Kinder Morgan	KMI	Yes	14.0%	-	75%	Yes
Macquarie Infrastructure	MIC	Yes	0.2%	-	78%	Yes
Magellan Midstream Partners	MMP	Yes	0.3%	-	89%	-
MPLX	MPLX	No	0.2%	-	57%	-
NuStar Energy	NS	Yes	7.4%	-	89%	-
ONEOK	OKE	Yes	0.6%	-	64%	Yes
Pembina Pipeline	PPL CN	Yes	0.2%	-	82%	Yes
Phillips 66 Partners	PSXP	No	0.1%	-	43%	-
Plains All American Pipeline	PAA	Mixed[2]	0.6%	-	69%	-
Shell Midstream Partners	SHLX	No	0.0%	Yes	33%	-
Tallgrass Energy	TGE	No	2.0%	-	44%	-
Targa Resources	TRGP	Yes	1.9%	-	70%	Yes
TC Energy	TRP CN	Yes	0.1%	-	92%	-
TC PipeLines	TCP	No	0.1%	Yes	43%	-
Williams Companies	WMB	Yes	0.1%	-	92%	Yes
Western Midstream Partners	WES	No	0.1%	-	75%	-

[1] Skin in the Game measures insider ownership of common units as a percentage of total shares outstanding.
[2] Unitholders vote for seven members of the board of directors, but the remaining six are designated or appointed by the GP
Source: Company Reports

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