



Global Asset Management

Global Listed Infrastructure

Whitepaper

Why sustainability matters for listed infrastructure



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The essential service nature and large environmental footprints of infrastructure assets make sustainability considerations a vital part of doing business.

We believe the incorporation of environmental, social and governance issues into an investment process both reduces risk of permanent capital loss and helps deliver attractive risk-adjusted returns.

Company engagement is fundamental to implementing change and influencing strategic direction.

This paper sets out the key environmental, social and governance issues that affect listed infrastructure and explains why it is crucial to keep sustainability factors front-of-mind when investing in the asset class.

What is sustainability?

The definition of sustainability is "the ability to continue at a particular level for a period of time¹". In an environmental context, means that "goods and services should be produced in ways that do not use resources that cannot be replaced and that do not damage the environment²".

The concept is often described as having three pillars: social, environmental and economic or - as some refer to it - people, planet and profits. This concept was developed in acknowledgement that many companies operate in ways that benefit short term profits without any consideration of the longer term implications.

What does this mean for asset management businesses?

As stewards of our investors' capital, we have a responsibility to assess all risks, both positive and negative. Since sustainability issues can affect a business both in the near term and in its ability to operate in the future, an assessment of these issues needs to be part of the due diligence process.

This can be done by incorporating environmental, social and governance factors into an investment process. Given the lack of consistent disclosure by companies and the complexity of many of the issues, we believe engagement with companies and stakeholders is an important part of this process. It creates a forum to ask for more information, assess a company's commitment to key initiatives and lobby for change.

Active managers need to consider these issues because they can have implications for profits. Operating without consideration of stakeholders, the environment or shareholders can lead to growth projects being thwarted, penalties being incurred, minority interests being ignored and/or licenses to operate being revoked.

Three pillars of sustainability



Source: HuffPost

Why does sustainability matter for listed infrastructure?

Infrastructure assets include toll roads, airports, sea ports, freight railways, passenger railways, utilities (electric, gas and water), oil and gas pipelines and storage, mobile towers and satellites. These assets exhibit several common characteristics; namely high barriers to entry, strong pricing power, the potential for sustainable growth and predictable cash flows.

A key difference between infrastructure and other sectors is that infrastructure companies provide essential services to society. That means that in most cases the customer is captive. If the service is substandard, the customer is reliant on the regulatory framework to ensure that problems are rectified properly and if not, that the company is penalised financially.

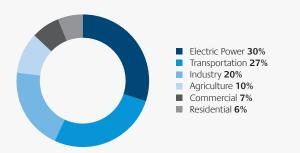
The following sections go into more detail about some of the key environmental, social and governance issues that face the infrastructure sector.

Environmental considerations – climate change

Climate change, driven by rising carbon emissions, poses a clear and present danger to both people and the planet. It is leading to global warming that is evidenced through glaciers shrinking, sea levels rising and more extreme weather events.

Man-made carbon emissions have many sources, as shown in the chart below, but the largest of them is electricity production from fossil fuels. Accounting for between 30% and 40% of the world's carbon emissions, changing the way we generate electricity has been the first step in combatting rising global temperatures. Doing so has become a global effort with countries creating meaningful targets and transition plans to reduce emissions, supported by tax incentives and/or renewable subsidies.

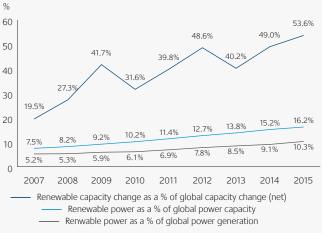
U.S. Greenhouse gas emissions by sector



Source: Center for Climate and Energy Solutions 2014

The effect of these efforts can be seen in the amount of renewable generation capacity that has been added over the last decade. In response to clean energy targets, utilities have changed the way in which they generate, transmit and distribute electricity, with renewable energy now accounting for half of all capacity additions globally. While renewable energy has many forms, the wind industry creates a case study for just how industries have changed in response to these targets. Economies of scale, technology improvement and continued investment have created declining cost curves to a stage where subsidies are no longer needed in some parts of the world. It has also created additional investment opportunities in transmission, as the wind resource requiring connection to the main grid is often situated far away from the load centre where the power will be used.

Renewable capacity additions



Source: Bloomberg New Energy Finance/UNEP Global Trends in Renewable Energy Investment 2016

The transportation industry is also one of the largest sources of carbon emissions globally due to the consumption of oil. If the decarbonisation path is to continue, this implies that the natural resources we consume in order to travel must change. For politicians this has been a much harder concept to grasp than promoting low carbon electricity, as taxing oil has never been a popular move. While electric vehicle adoption levels are low today, there is potential for this to grow over time. We have already seen countries such as the UK, France, Norway and China discussing bans on the sale of diesel and petrol vehicles and we have seen manufacturers already positioning themselves for changes in the industry. This provides opportunities for utilities to invest in the build-out of electric vehicle charging stations and associated infrastructure upgrades.

Environmental considerations - other

While we acknowledge climate change to be the single largest issue facing global listed infrastructure today, several other environmental topics impact the infrastructure sector. These include:

- Emission of air pollutants (sulphur and nitrogen oxides) and toxic particles by electric utilities harming people's health
- Safe transportation and storage of oil and gas
- Policies/initiatives in place to reduce environmental impact/emissions
- Level of resource consumption
- Legacy environmental issues and the remedial action being taken
- Stranded asset risk

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Energy infrastructure networks such as oil and gas pipelines transport combustible liquids or gaseous materials across thousands of kilometres, often passing close to water resources and population centres. Operating and maintaining such assets in a safe manner is crucial for the environment. Failure to acknowledge these responsibilities can affect employees, communities, political relationships, a company's social license to operate and ultimately their profits and equity value.

Pipeline companies are reliant on regulatory and political approval to operate. Without a commitment to safety the probability of being able to create sustainable returns over the long term is questionable. Operating safely involves much more than having the right policies and procedures in place; it becomes a cultural issue. The absence of an appropriate corporate culture implies risks that an equity investor may simply prefer not to take.

The pipeline industry could also face stranded asset risk, where a previously valuable piece of infrastructure becomes obsolete or unneeded well before it reaches the end of its useful life. Many coal assets have become stranded much sooner than expected, as cheap shale gas and reduced cost curves for renewables presented economically rational and more environmentally palatable alternatives.

An evolving transportation sector, as electric vehicles become more widely used, could also have ramifications for energy transportation assets. Many companies in this sector have already begun to diversify the range of liquids/gases they transport, in order to mitigate business risk.

Social considerations

Social considerations relate to the treatment of people and society. They include all stakeholders – customers, employees, shareholders, suppliers etc. Key issues affecting infrastructure companies include:

- Workplace health & safety
- Employee relations
- Employee turnover
- Customer & supplier relationships
- Dealing with indigenous populations
- Public leadership on social issues
- Operations or businesses that deal with rogue governments

This is probably the least understood area of sustainability, but for infrastructure companies the implications, especially on the customer side, are clear. Infrastructure assets have monopolistic characteristics, meaning that customers are essentially captive - their ability to shop around/switch supplier is limited. This puts service quality under intense scrutiny from the public, politicians, regulators and the media.

NextEra Energy's virtuous circle



Source: NextEra Energy

Governments and regulators issue licenses to operate. Operations are then monitored to ensure that customers are being treated fairly and appropriately. Abuse of this license can lead to penalties, reduced returns or in the worst case scenario, license revocation.

Take the water industry for example. In most countries the choice of provider is non-existent and yet our health relies on the fact that our water is clean and potable. Since we cannot change provider we rely heavily on regulators and regulation to provide the correct framework to ensure that the service meets certain standards and is not detrimental to human health.

When this customer focus is lost, significant ramifications such as the water crisis in Flint, Michigan can occur. In this instance, the water source was changed from Lake Huron to the Flint River, with the latter requiring more extensive water treatment to be potable. When the necessary level of treatment was not carried out, Flint River water corroded the water pipe linings, allowing lead from the pipes to contaminate the water supply. Lead causes significant health problems especially in children, meaning that the effects of this decision will be seen for years to come. It's astonishing that the switch of water supply even occurred since Flint River had repeatedly been ruled out as a drinking water source for many years before.

Flint River's water vs Lake Huron's water



Source: PLOS.ORG

A company's relationship with its employees is also highly significant. Research done by the University of Kansas used 100,000 surveys collected by the employer/employee review website Glassdoor between 2008 and 2012 show that family firms exhibit a human capital-enhancing culture that improves a firm's performance. It is also fair to say that without satisfied employees, staff turnover increases. The cost of replacing an employee can be 1.5 times the salary of the departing employee³. Corporate culture can be an extremely powerful driver of financial performance and there is a long history of research linking the two⁴. It makes sense that a strong corporate culture should have positive implications for a company's bottom line.

Safety is a key consideration for infrastructure companies given the large scale of the assets. We believe that a commitment to safety is cultural and that needs to be front of mind for accidents to be avoided. When there is no culture of safety, accidents such as the freight train derailment in Lac-Megantic can occur. In 2014 a train carrying crude oil derailed and subsequently exploded in Lac-Megantic in Quebec. This lead to the death of 47 people, the demolition of 40 buildings and the evacuation of 2,000 residents.

Lac-Megantic train derailment



Source: The Atlantic

The Transportation Safety Board cited 18 causes and contributing factors to this crash. These included a lack of "effective training or oversight"; the absence of "key processes" from the management system; and the fact that the "Transport Canada Quebec Region did not follow up to ensure that recurring safety deficiencies... were effectively analysed and corrected, and consequently, unsafe practices" were allowed to persist.

Having the correct policies in place is a start but instilling safety into a culture is something that can only be achieved through engagement with all levels of a business.

Boots on the ground with SSE



Source: CFSGAM

Governance

While the level of environmental and social consideration for infrastructure is greater than in most other sectors the concept of good governance is universal. Governance relates to the structures that define the rights and responsibilities of an organisation's stakeholders; including the procedures for making company decisions. The range of stakeholders for any company includes the board, employees, customers, suppliers and shareholders. Different stakeholders have varying and sometimes conflicting priorities and objectives. It is vital to ensure that a framework exists to ensure all are treated equitably.

Remuneration structures often drive behaviour. We believe that appropriate incentive structures for senior executives are vital to ensure that their interests align with other stakeholders, including shareholders, employees, regulators and customers.

Companies where the board and management have a material stake in the equity value of the company, or where Total Shareholder Returns are used as a management incentive, are more likely to make decisions that benefit all shareholders. For infrastructure assets we also look for key performance measures to include some of the things discussed above such as safety and customer satisfaction.

The Board of Directors often has the final say on matters. It is important that the board's structure and the skills of its members are set up in a way that is likely to lead to positive decisions for the company. Diversity of the board in terms of skills, backgrounds, industry experience, race, gender etc. creates diversity of views and helps to ensure that all aspects of a decision are considered carefully.

Research from McKinsey & Company⁵ showed that the top quartile of a group of companies for gender diversity were 15% more likely to have financial returns greater than their national industry medium. That number rose to 35% when racial diversity was considered.

⁵ McKinsey & Company "Diversity Matters" 2015

³ Source: CFO.com "Why Employee Turnover Hits the Bottom Line"

⁴ Source: Journal of Organizational Behaviour "Which comes first, organizational culture or performance?"

Being equity investors, we also need to consider the protections afforded to us as minority shareholders. The presence of a controlling shareholder with interests that may not align with minority equity investors should be regarded with caution. Some companies can have controlling government, family or related party interests. It is important to be aware of the implications both positive and negative - that these interests may present to minority shareholders.

A good governance structure is required to protect investments. Permanent capital loss is a risk when incentives are not aligned and conflicting business agendas drive decisions at the expense of the shareholder.

Conclusion

Infrastructure assets have a unique set of characteristics that make sustainability an important part of their business activities. The long dated nature of the assets, their essential service offering to society and the sheer size of the assets means environmental and social considerations are paramount.

We believe that the incorporation of environmental, social and governance issues into our investment process both reduces risk of permanent capital loss and helps deliver attractive riskadjusted returns.

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