Sustainable Investment

2023 Year in Review

LAZARD
ASSET MANAGEMENT

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Our Firm at a Glance

For decades, Lazard Asset Management has been managing investment portfolios and providing investment advice to institutional and individual investors around the world. On-the-ground fundamental and quantitative research is the foundation of our investment approach. Located in the United States, Europe, Asia, and the Middle East, our investment professionals collaborate on detailed analyses, integrating knowledge across regions, sectors, and asset classes to arrive at unique insights. We pride ourselves on this blend of local expertise and global reach, and we empower our investment teams to make independent investment decisions. Lazard Asset Management has been managing global investment portfolios for institutions and investors for decades. Our detailed analysis starts with a local presence, integrating deep sector knowledge and asset class expertise, to arrive at unique insights. Our success is derived from our globally integrated platform, which enables us to collaborate on universally impactful themes through our materiality framework, and empowering our investment teams to make independent decisions that best serve our client's investment goals.

$247bn
Assets Under Management

175
Years Serving Clients

$2.4bn
Operating Revenue

48
Languages

3,291
Employees

93
Nationalities

As of 31 December 2023
Source: Lazard

A Message from Our CEO

Evan Russo
Chief Executive Officer
Lazard Asset Management LLC

Our industry witnessed yet another year of change in 2023. A higher-for-longer interest rate environment, ongoing geopolitical tensions, and lingering market volatility caused investors around the world to re-evaluate their approach to risk, and we already see that 2024 is bringing more of the same. Here we detail the ways in which we are navigating this landscape with sustainability in mind, using fundamental analysis and ongoing engagement to address the issues that we believe are most likely to impact our clients.

Our approach to sustainable investing for relevant strategies is driven by a conviction that companies can only be successful if they are aware of the material risks and opportunities they face. In the context of sustainability, this means monitoring not only the obvious effects of the energy transition—like regulatory changes that could lead to higher operating costs, or growing consumer demand for sustainable products and services—but also the effects that could travel down supply chains. This year's report highlights the sustainability-related risks and opportunities we are seeing in sectors like insurance, transport, and consumer goods, and the tools we are developing to understand relatively new areas, like biodiversity data collection or greenwashing risk.

The issues we identify in our bottom-up, fundamental research processes are the same issues we address in our engagement efforts with portfolio companies—a hallmark of our approach to active ownership. In 2023, we engaged with companies on a wide range of topics related to natural capital, human capital, and governance, and made significant strides in measuring the outcomes of these engagements. Our key active ownership highlights over the year included an enhanced global voting policy, improved review of shareholder proposals, and improved tracking of tangible engagement results.

This report focuses on our key sustainability initiatives in 2023, as well as providing an outlook of what lies ahead in 2024—a historic election year that could have implications for sustainable investing and related regulatory frameworks. With more change to come, we look forward to helping our clients understand the impacts on sectors, asset classes, and regions with our ongoing analysis and insights.

"Our approach to sustainable investing for relevant strategies is driven by a conviction that companies can only be successful if they are aware of the material risks and opportunities they face."

Our Sustainable Investment Principles

The Principles Driving Our ESG Integrated and Sustainability-Focused Portfolios

We apply a rigorous, active approach to investing that aligns with our core principles set out below. Our mission is to drive investment returns and improve client outcomes by integrating financially material sustainability considerations into our research and portfolio management of our ESG-integrated and sustainability-focused portfolios.

We also believe engagement and voting are crucial to getting the best results for our clients via active ownership and we have a long history of engaging with companies and advocating for clients' best interests through voting. We also have a history of ensuring that our investment professionals are the ones who ultimately make allocation decisions; voting and engagement responsibilities lie primarily with them.

In the spirit of transparency, this report showcases examples of where financially material sustainability considerations are embedded in our research and investment decision-making for relevant strategies and products and how our active ownership approach is integral to our processes.

Principle One

Fiduciary

Our foremost responsibility is to act in the best interest of our clients, with a resolute focus on seeking to protect our client capital and maximising long-term returns.

Principle Two

Holistic Research

Our investment approach is rooted in deep fundamental research, which includes analysing financially material human capital, natural capital, and governance considerations as we do other fundamental factors. We do not support firm-wide exclusion policies based on screens, nor do we solely depend on external ESG ratings providers for portfolio decisions. This integrated approach provides a holistic picture of risks and opportunities.

Principle Three

Active Owners

Regular interactions with companies in client portfolios are vital to our investment process. As stewards of our clients' capital, we emphasise engagement and exercising our clients' voting rights. These responsibilities lie primarily with our investment professionals.

Principle Four

Transparency

We are committed to providing transparency into our processes and frameworks for ESG integration, evidence of where and how investment analysis is impacted by human capital, natural capital, and governance considerations, and our stewardship efforts.

Focus on Financial Materiality

As sustainable investment opportunities have grown in recent years, so too have the associated risks. Our proprietary Materiality Mapping Framework is designed to chart risks by industry as they evolve, providing a standardised yet adaptable approach to assessing the materiality, or relevance, of particular sustainability issues. This map is dynamic: it reflects the views of our sector analysts, who understand the nuances of sustainability issues in particular industries, geographies, and asset classes. In 2023, our analysts revised their views and updated the Materiality Map (Exhibit 1), which now captures more sector-specific idiosyncrasies.

Through our 2023 update, we identified several recurring themes across four major categories, including:

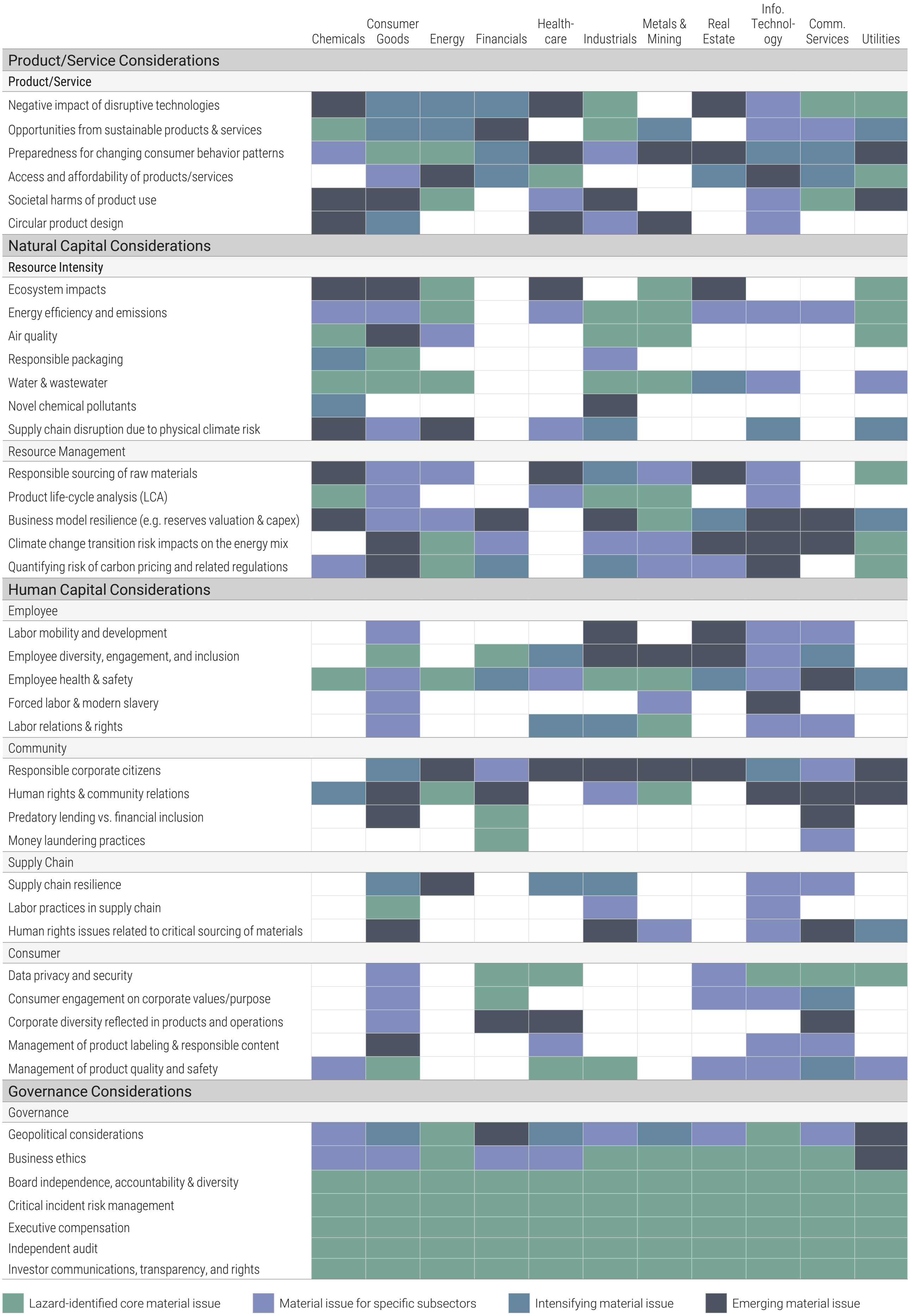
- In the **Product/Service** category, access and affordability was elevated as a financially material issue across several sectors in light of the rising cost of living, while the impacts of climate change transition on the energy mix was introduced as an emerging material topic across most sectors given newly introduced regulations and increasing physical risk.
- **Natural Capital** remains a key analyst focus, with the majority of sustainability-related issues identified by our relevant investment professionals related to this area, in particular resource intensity and management in light of the climate transition.
- **Governance**-related topics have grown in importance over the past several iterations of the map, due largely to rising geopolitical tensions impacting companies and supply chains. It is also worth noting that this category tends to be a particularly high priority in emerging markets, due to country-specific differences in shareholder rights.
- The popularisation of AI and machine learning has led to increased focus on **Human Capital**, including labour mobility and business model resilience.

We also focused our attention on areas of the map that are growing in importance, some examples of which are highlighted below. These provide insight into how the Materiality Map plays out in our research processes, and the layers of information designed to gain a comprehensive understanding of these four categories.

“Sustainability considerations are not uniform in scope, scale, or duration across industries and geographies. As such, investors need to recognise and understand what the most financially material issues are, the nuances involved in terms of how national standards influence corporate and consumer behaviour and how capital markets are likely to reflect this in asset prices going forward.”

Chris Whitney,
Global Research Director

Exhibit 1: Our Materiality Map



A Closer Look at Natural Capital

Changing Emissions Regulations

While the European Union Emissions Trading System (EU ETS) has historically allocated a certain number of free emission allowances to safeguard industries' competitiveness and avoid carbon leakage, it is gradually phasing them out. For the aviation industry, these free emissions allowances are expected to be 100% phased out later this decade.[1] As such, we modelled which airlines will see the sharpest increase in compliance costs for intra-EU flights; the extent to which emissions allowances will evolve for airlines over time; and how this could affect competitive advantages going forward (Exhibit 2). Our results indicate that while every airline will see additional compliance costs from the EU ETS, the relative cost advantage of leaders will be widened compared to peers. This could drive additional market share gains or margin gains and further strengthened our investment thesis in support of one of the airlines that is a leader in terms of both carbon and cost efficiency. Our thesis is that it should see its relative advantage widen further as it loses relatively fewer credits than its peers.

Exhibit 2: Diverging Airline Performance on Emissions

Airline	Estimated cost with 2023 price and 2023 emissions minus free allocations (mln EUR)	Estimated cost with 2030 price and 2023 emissions minus free allocations (mln EUR)	EUR/ASK (cents)	Estimated cost with 2030 price and 2023 emissions without free allocations (mln EUR)	EUR/ASK if no free allocations (cents)	Percentage increase (%)	Extra EUR/ASK if no free allocations and 2030 price (cents)
Airline 1	398	749	0.59	1,293	1.02	73	0.71
Airline 2	–	–	–	170	1.10	100	1.10
Airline 3	77	145	0.52	238	0.85	64	0.57
Airline 4	154	291	0.67	654	1.51	125	1.15
Airline 5	155	292	0.71	516	1.26	76	0.88
Airline 6	212	400	1.02	565	1.44	41	0.90

	2023	2030
Carbon price	85	160
Airline 1 in 2023, million passengers (in scope of ETS)	126	

As of 22 March 2023
Source: Lazard

> “After modelling the impact of the EU ETS as it becomes more stringent for airlines, we found that while all airlines are likely to see additional costs, the relative cost advantage of leaders will widen compared to peers, which helps to support our thesis on one of the leading airlines from an emissions perspective.”

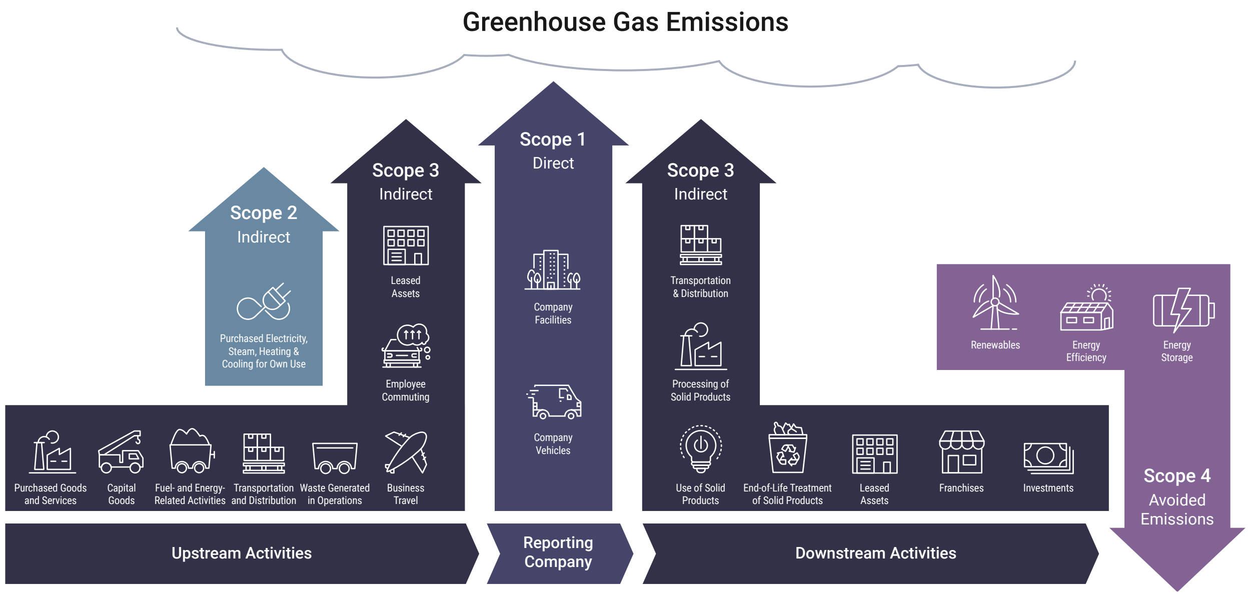
Antoine Champenier,
Research Analyst, Industrials

Avoided Emissions

Avoided emissions, also known as Scope 4 emissions, are a relatively new concept in the world of sustainable investing. Unlike Scope 1, 2, and 3 emissions, which measure emissions tied to a company's operations and value chain, Scope 4 emissions refer to any reduction in emissions that occurs outside of a product's life cycle or value chain, but occurs as a result of that product's usage (Exhibit 3).[2] Avoided emissions can be material to company performance: If a company's avoided emissions calculation rises faster than overall group revenue growth rates, for example, it may indicate increasing exposure to climate solutions. Yet quantifying the value of avoided emissions remains a challenge, as standardised methodologies are still in development and can lead to data inconsistencies. Through 2023, we engaged with several companies to understand their views on calculating Scope 4 emissions.

There are two core approaches in the market: the Attributional Approach, which uses a life cycle assessment to compare emissions to a reference alternative product, and the Consequential Approach, which estimates total system-wide changes from direct and indirect emissions (Exhibit 4). Both methods have their complexities and may face double-counting issues; disclosing sources and updating assumption frequencies is therefore crucial for accuracy. But while diverging methodologies remain a limitation, the level and detail of avoided emissions reporting are expected to increase over time.

Exhibit 3: Greenhouse Gas Emissions by Scope



For illustrative purposes only.
Source: Lazard, GHG Protocol

Exhibit 4: Two Approaches to Measuring Avoided Emissions

Avoided Emissions Approach	Advantages	Disadvantages
Attributional approach	• Relatively simple estimation approach • Scalable to large product portfolios	• Ignores market-mediated effects (i.e. introducing a new product/technology)
Consequential approach	• Considers market-mediated effects	• Lack of available data • More complex to calculate given larger number of factors estimated

> As the standards become more sophisticated, our relevant investment teams should be able to identify investment opportunities that may be undervalued as companies are not being given credit in the market for selling products that provide significant avoided emissions.

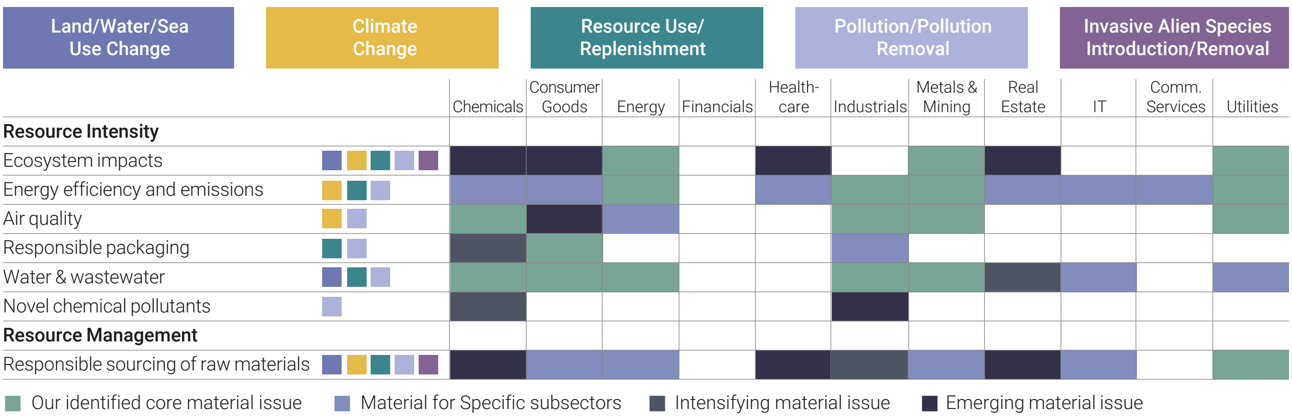
Filiberto Fabbro,
Research Analyst, Sustainable Investment

Biodiversity

Assessing the investment risks associated with biodiversity loss poses a unique set of challenges, given that much of it is company- or location-specific. We break biodiversity loss down into the five drivers identified by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), as illustrated in Exhibit 5. We believe successfully managing biodiversity-related risks requires an understanding of how related losses are likely to vary based on industry, regional exposure, and company specifics. By understanding these factors, investors can identify sectors most reliant on (or impacted by) changes in natural systems.

We identify these risks by overlaying our Lazard Asset Management Biodiversity Framework onto our Materiality Map, which maps relevant driver(s) of biodiversity loss to specific natural capital considerations. Doing so enables us to capture a broad range of biodiversity-related considerations for each sector, which we believe reflects the complexity of the topic. To support bottom-up fundamental analysis and engagement on these issues, we believe topic-specific datasets, such as those provided by the Carbon Disclosure Project (CDP), are better-placed than top-down aggregated indicators. Further analysis of the availability and usage of biodiversity data can be found in our research paper, Biodiversity Data: Is It Fit for Purpose?

Exhibit 5: LAM's Biodiversity Framework



Source: Lazard

Shifting Global Climate Policies

According to Bloomberg New Energy Finance (BNEF) and the World Economic Forum, global low-carbon investment surpassed $1 trillion for the first time in 2022, with the largest share of spending targeting renewable energy and electrified transport.[3] Additionally, governments around the world are introducing incentives to promote clean energy use on the parts of households and businesses, including the governments of Australia, China, Germany, India, and the United States.[4]

As companies and governments continue to direct more capital toward clean energy, our teams consider how different sectors and geographies could be impacted by this structural shift. Specifically, we believe it is crucial to understand how specific aspects of the transition—including policy changes, technology cost curves, and differing emissions trajectories—will impact individual investments. As fundamental investors, we are constantly monitoring the evolving macro-economic and regulatory landscape, focusing on any policy changes that stand to impact companies in which we invest. The below examples highlight the ways in which higher-level policy changes are factored into our fundamental analysis, focusing on specific businesses we have evaluated in the past year.

“The regulatory and technological drive towards decarbonisation of the economy will impact many sectors resulting in attractive opportunities for us as fundamental investors.”

Louis Florentin-Lee,
Managing Director,
Portfolio Manager/Analyst,
Global Equities

Example #1: Korean chemicals company

The Inflation Reduction Act (IRA) in the United States, which offers a range of financial incentives for companies involved in the transition to clean energy, has ripple effects for companies around the world.[5] We consider the benefits of the IRA to be a significant tailwind for a Korean chemicals business involved in electronic vehicle (EV) battery and battery materials businesses. Its privileged position within the IRA legislation provides a moat for their growth in revenue and in market share, and we expect its expansion efforts to focus heavily on Korea and the United States because of the IRA. While it is more expensive to build plants in the United States compared to Korea, we believe this chemicals business will likely benefit from IRA and other local subsidies. Additionally, the higher margins they believe they can receive in the United States, especially given that the IRA limits competition, is likely to make its US business one of its most profitable over time.

“We consider the benefits from the IRA to be a significant tailwind for this company’s EV battery and battery materials businesses. In our view, the business has a privileged position within the IRA legislation, providing a moat for their growth and market share.”

Ryan Mims,
Research Analyst, Emerging Markets Equity

Example #2: European industrials company

Roughly a third or more (30%–40%) of global energy use is from buildings and the biggest contributor to that is the energy required to heat and cool those buildings. Therefore, we believe any business involved in the distribution of HVAC and refrigeration equipment plays a central role in improving buildings' energy, particularly through product offerings related to low-carbon refrigeration. We also believe the company is well positioned to benefit from upcoming environmental regulations. For example, its revenues and cash flows are positioned to benefit from upgrades and retrofits that will be required by 2030 under new European laws.

> *"Some companies may be well placed to benefit from upcoming environmental regulations in the United States and Europe. For example, the EU will be tightening regulations on refrigerants in 2030, which means companies providing the required upgrades and retrofits needed to comply with these regulations could see increased business."*

Dan Rozier,
Research Analyst, Industrials

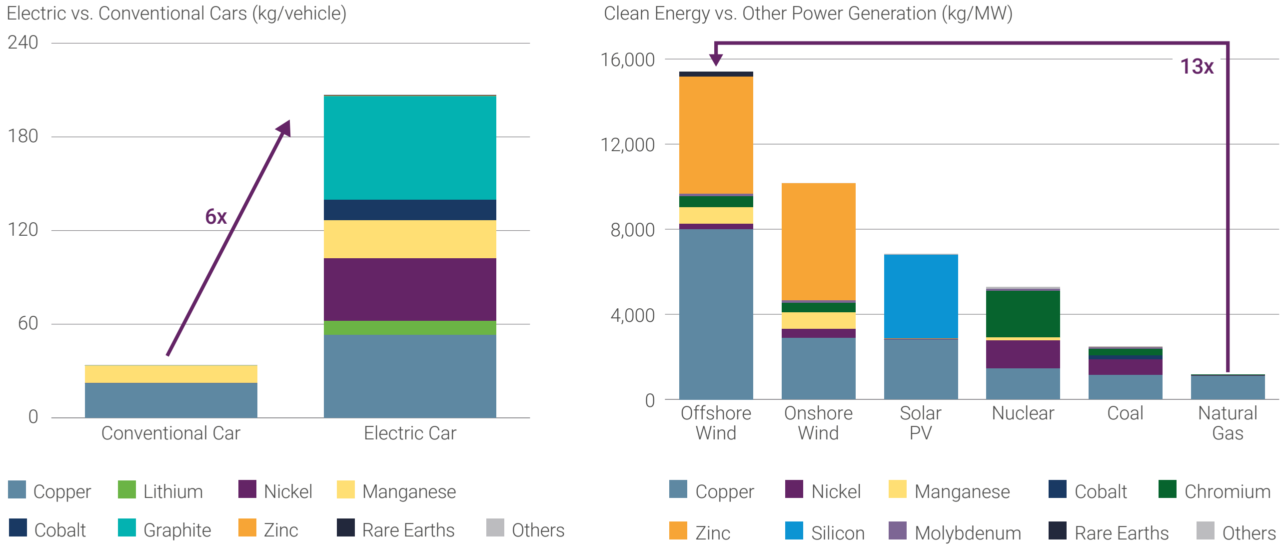
Supply Chain Disruptions

The transition to sustainable energy will require materials that many countries simply do not have the capacity to produce right now.[6] Globally, undersupply of mission-critical materials and insufficient grid infrastructure to meet electrification needs may lead to bottlenecks in advancing the energy transition. This is partly because energy transition technologies use critical metals and minerals (as well as other materials) more intensively than traditional technologies do. An EV, for instance, uses six times the mineral inputs of a conventional vehicle, while offshore wind requires 13x the minerals of gas-fired power (Exhibit 6).

Because of this, policymakers are working to secure access and incentivise supply. IEA has identified nearly 200 related policies, over half of which have been enacted in the past few years. These include the Critical Raw Materials (CRM) Act in Europe, the IRA in the United States, the Critical Minerals Strategy in Australia, and the Critical Minerals Strategy in Canada.[7]

Exhibit 6: Energy Transition Technologies Are Minerals Intensive

Minerals Used in Energy Transition Technologies vs. Conventional Technologies



As of May 2021

Source: IEA: The Role of Critical Minerals in Clean Energy Transitions

Example #3: US metals and mining company

Our investment thesis on this US metals and mining business is driven by its pure-play exposure to high-quality lithium compounds, namely hydroxide and carbonate, which are needed to supply battery-grade lithium to the fast-growing electric vehicle and energy storage markets. We expect significant EBITDA growth over time, through capacity expansion, achievement of synergies, and improved realised pricing, which should result in stronger financial performance and improved returns. After a recent transaction, we believe the business is well positioned to become an industry leader in terms of production with leading, low-cost assets that have both geographic and production diversity.

> *"Our thesis is further strengthened by the fact that it has lithium hydroxide capacity in both the US and China, which appeals to OEM customers looking for lithium hydroxide supply inside and outside of China."*

Shanu Mathew, Portfolio Manager/Analyst, US Sustainable Equity

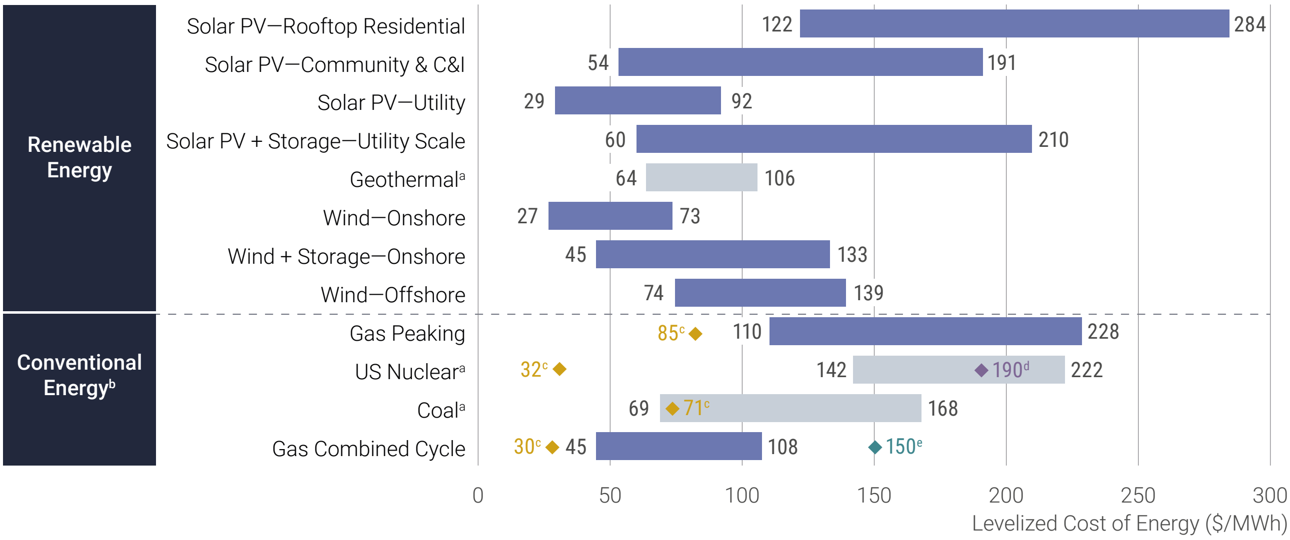
Technological Disruptions

Despite slight upticks in 2023, according to the latest available data set, costs for renewable energy technologies have fallen dramatically over the last 10–15 years. The pace and magnitude of such reductions have exceeded most experts' expectations for several technologies. A study by the Institute for New Economic Thinking at the University of Oxford, for example, found that of nearly 3,000 projections by models designed to forecast solar cost declines between 2010 and 2020, the mean expected annual cost reduction at the time was 2.6% with a maximum of 6%—but actual costs declined 15% annually during the period. Lazard's Levelized Cost of Energy (LCOE) research work, which since 2007 has analyzed the levelized costs of energy from various generation technologies, energy storage technologies, and hydrogen production methods, continues to evidence that a range of renewable technologies are increasingly cost-competitive with conventional sources of energy. Recent cost pressures in the industry, including interest rates have, however, caused an increase at the low end of the LCOE for the first time. In our view, sizable and well-capilised companies that can take advantage of supply chain and other economics of scale, and that have strong balance sheets to support weather fluctuations in the macro-environment, will be well positioned to continue leading the build-out of renewable energy assets.

Exhibit 7 shows how the cost of several renewable technologies compares to the cost of conventional energy in many large economies, even without subsidies.

Exhibit 7: Lazard's Proprietary Levelized Cost of Energy Shows Renewables Are Cost-Competitive

Selected renewable energy generation technologies are cost-competitive with conventional generation technologies under certain circumstances



Note: unless otherwise indicated, the analysis assumes 60% debt at an 8% interest rate and 40% equity at a 12% cost.

(a) Given the limited public and/or observable data available for new-build geothermal, coal and nuclear projects the LCOE presented herein reflects Lazard's LCOE v14.0 results adjusted for inflation and, for nuclear, are based on then- estimated costs of the Vogtle Plant. Coal LCOE does not include cost of transportation and storage.

(b) The fuel cost assumptions for Lazard's LCOE analysis of gas-fired generation, coal-fired generation and nuclear generation resources are $3.45/MMBTU, $1.47/MMBTU and $0.85/MMBTU respectively, for year-over-year comparison purposes.

(c) Reflects the average of the high and low LCOE marginal cost of operating fully depreciated gas peaking, gas combined cycle, coal and nuclear facilities, inclusive of decommissioning costs for nuclear facilities. Analysis assumes that the salvage value for a decommissioned gas or coal asset is equivalent to its decommissioning and site restoration costs. Inputs are derived from a benchmark of operating gas, coal and nuclear assets across the U.S. Capacity factors, fuel, variable and fixed operating expenses are based on upper- and lower-quartile estimates derived from Lazard's research.

(d) Represents the illustrative midpoint LCOE for Vogtle nuclear plant units 3 and 4 based on publicly available estimates. Total operating capacity of ~2.2 GW, total capital cost of ~$31.5 billion, capacity factor of ~97%, operating life of 60 – 80 years and other operating parameters estimated by Lazard's LCOE v14.0 results adjusted for inflation.

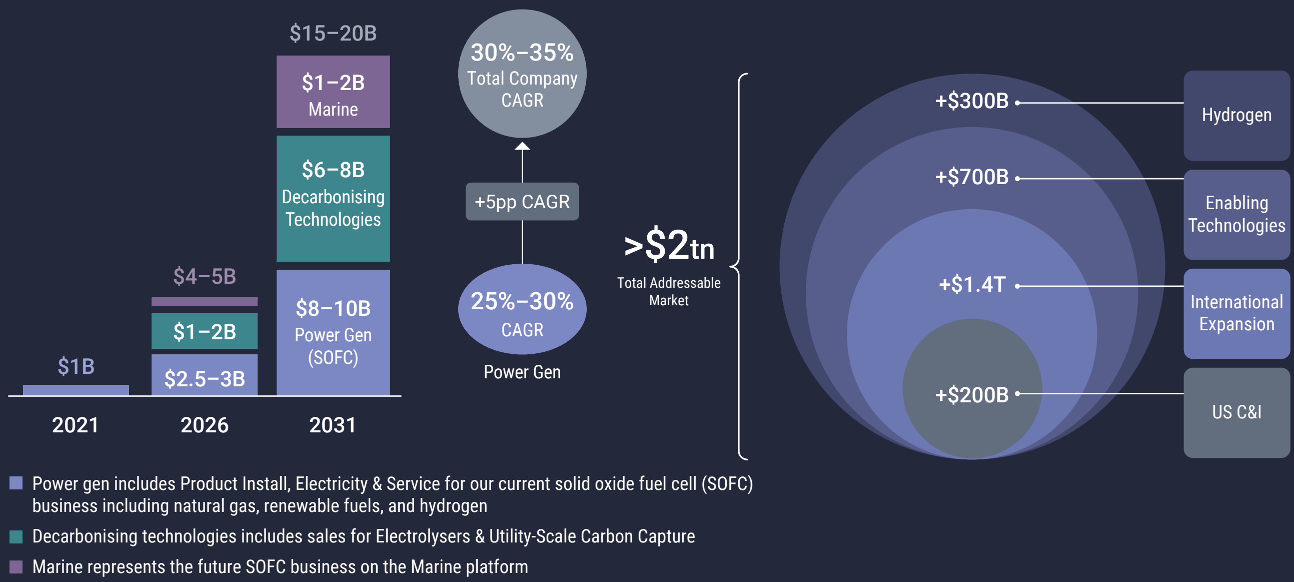
(e) Reflects the LCOE of the observed high case gas combined cycle inputs using a 20% blend of green hydrogen by volume (i.e., hydrogen produced from an electrolyzer powered by a mix of wind and solar generation and stored in a nearby salt cavern). No plant modifications are assumed beyond a 2% increase to the plant's heat rate. The corresponding fuel cost is $6.66/MMBTU, assuming ~$5.25/kg for green hydrogen (unsubsidized PEM).

Source: Lazard and Roland Berger estimates and publicly available information.

Example #4: US electric power equipment company

As this company continuously lowers the total cost of electricity delivered from its power servers, and while it develops new technologies and verticals, it should maintain and further accelerate its strong growth. It has successfully lowered the total cost of electricity delivered to a competitive rate compared to utilities in a growing number of states; it broke from its historical track record of 10%–15% annual cost declines for the first time in 2022, but is on the decline again as of 2023. Additional opportunities could materialise, should they successfully commercialise their electrolysers as well as other new verticals and technologies in transportation, heating, and carbon capture (Exhibit 8).

Exhibit 8: Electrolysers Market Opportunity



As of 20 February 2023
For illustrative purposes only.
Imagery reflects analysis provided by Bloom Energy in 2020. Lazard's analysis was conducted in 2023.
Source: Lazard, Bloom Energy

> *"As this company continuously lowers the total cost of delivered electricity from its power servers, with costs now competitive compared to utilities in an increasing number of states, we believe its strong growth should be sustained or potentially accelerated."*

Koen Popleu,
Portfolio Manager, Climate Action

Example #5: Latin American steel producer

Steel producers play a central role in supplying the world with a key material for construction but face many challenges to meet decarbonisation goals. As part of our ongoing research and due diligence, we met with this steel producer's in-house experts on Electric Arc Furnaces and some of the associated capex investments. We discussed its decarbonisation efforts, including technical details on economics, energy requirements, technology, and the quality of raw materials for the global transition to greener steel. This discussion further validated our investment thesis, which is that their pledge of 20% emissions reduction by 2030 is realistic, economically feasible, and compelling. It also supported our view that the company has a competitive advantage in the industry.

"The company's decarbonisation efforts—including technical details on economics, energy requirements, and the quality of raw materials needed for the global steel transition—validated our investment thesis. We believe the 2030 targets put forth by the company are realistic and economically feasible, and we believe they have a competitive advantage in the industry."

Lada Emelianova,
Research Analyst, Emerging Markets Equity

Physical Impacts of Climate Change

In 2023, the United Nations declared an era of "Global Boiling" as countries around the world experienced record-breaking temperatures. July alone, for example, saw the hottest three-week period ever recorded globally and the three hottest days on record, with scientists from the World Meteorological Organization and the European Commission's Copernicus Climate Change Service describing conditions as "remarkable and unprecedented."[9]

The United States faced 377 weather and climate disasters since 1980 where overall damages and costs reached or exceeded $1 billion (including CPI adjustment to 2024) and total cost exceeded $2.67 trillion. In 2023, the country faced 28 climate-related disasters—the highest volume on record—costing $93.1 billion per year.[10] Risks and vulnerabilities are likely to be even greater in many emerging markets countries with less infrastructure and fewer resources to manage the stress of climate events. Globally, although estimates range, the impacts on the economy could be significant if no action is taken. For example, Deloitte estimates that by 2070, 7.6% of annual GDP, or $178 trillion, could be lost if no action is taken.[11] According to a 2021 estimate by SwissRe, up to 10% of GDP could be at risk by 2050 if the world stays on its 2021 emissions trajectory and does not meet the Paris Agreement or Net Zero targets.[12]

In some cases, these same risks may also pose opportunities for companies taking advanced action to mitigate them or provide solutions. We expect to see growing demand for companies providing adaptation solutions in particular, as highlighted in our report on the growing need for sustainable agriculture, Setting the Table for 10 Billion: The Need for Sustainable Agriculture.

"Over time, we believe a company that is increasingly focused on designing crops that can withstand more extreme weather events has potential to generate increased revenues over the long term."

Terance Brennan,
Portfolio Manager,
Commodities, Real Assets, and Sustainable Agriculture

Example #6: US insurance brokers' role in navigating climate risk exposure

The increased frequency and severity of extreme weather events have been a key driver of the growth seen in insurance premiums over the last five years. Consequently, it has become increasingly expensive and complex for corporates to mitigate their risk exposures. Insurance brokers can influence price by working in partnership with the insurers and their customers to negotiate mitigation efforts, such as installing monitoring and detection equipment as part of the insurance terms. By doing so, they not only lower the cost for the corporate and the liability for the insurer, but also the intensity of natural resource use, i.e. by preventing or detecting leaks or other issues early.

"*Insurance brokers are in the unique position to recommend to customers the most effective types of insurance, including new emerging risks, while negotiating the best possible price.*"

Jonathan Morris,
Research Analyst, Financials

Example #7: Australian insurance companies

We met with two Australian insurance companies to discuss the impact of physical climate change on the cost of insurance. The Australian market has missed their catastrophe bond (CAT) insurance allowances for many years, which has fed into the increased cost and pass-through in pricing. Reinsurance premiums have increased by 30%, but $0.20/$1.00 now goes to perils or reinsurance costs. We also discussed their capabilities in CAT modelling and the technical capabilities they have invested in to refine their CAT models and improve pricing.

> *"By leveraging their vast catastrophe databases and strong partnerships with the insurers, insurance brokers play a key role in helping corporates understand and mitigate climate risk."*

Adrian Cheung,
Research Analyst, Australian Equity

Strategy Highlights

Financially material sustainability considerations are built into our ESG Integrated and Sustainability-Focused investment strategies. The below examples illustrate the ways in which these considerations—ranging from corporate governance to greenwashing risk—are embedded into our research and decision-making processes across asset classes.

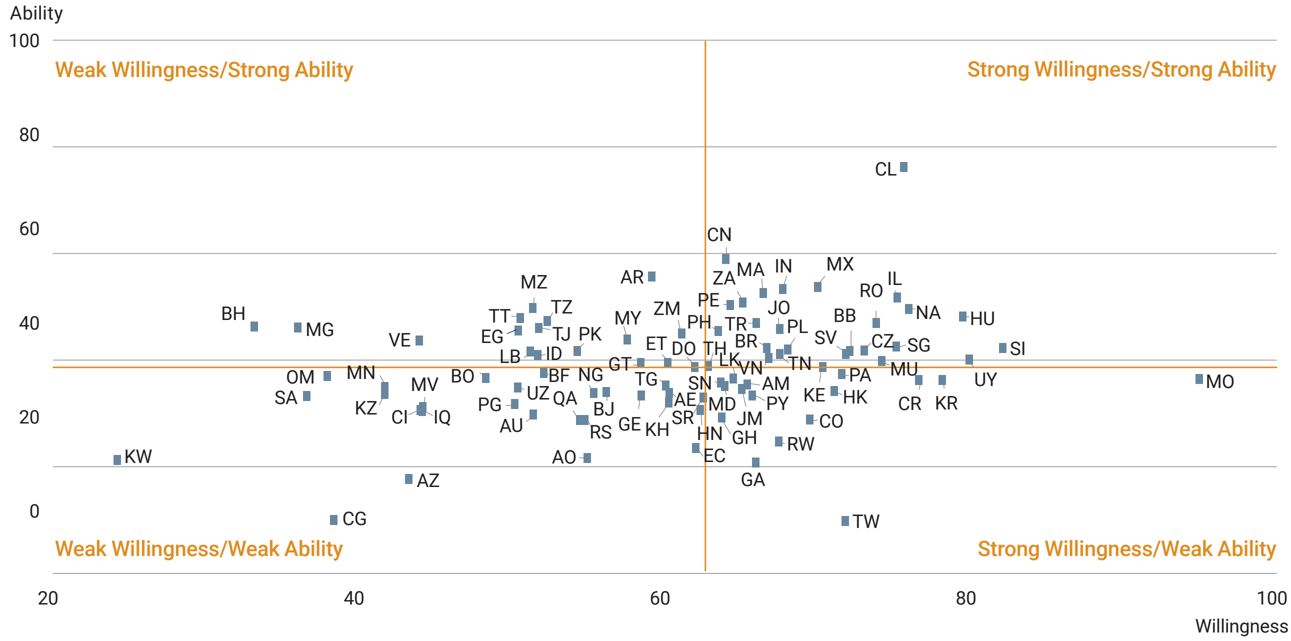
Emerging Markets Debt

The Emerging Markets Debt team utilises a proprietary sovereign climate risk model that assesses each country in three categories: willingness to transition to net zero carbon emissions (e.g. its climate-related policies); ability to transition (e.g. the quality and abundance of natural resources available to support these efforts); and vulnerability to climate change (e.g. its ability to adapt to or mitigate climate-related risks). Data are adjusted by a three-year trailing factor (where available), and scores ranging from zero to 100 result from an aggregated percentile ranking of each equally-weighted indicator; the model also generates individual scores for each indicator and for each of the three pillars of willingness, ability, and vulnerability. These scores are designed to supplement the research process across relevant strategies and to help us understand how climate risk could impact sovereign credit quality. This process helps us monitor risk over time, and to identify specific countries, like Chile, that are well positioned to confront the energy transition versus others, like Kuwait and the Republic of Congo, that could potentially face greater difficulty (Exhibit 9). Interestingly, we see no correlation between sovereign risk spreads and sovereign climate risk scores (Exhibit 10). Our analysis suggests that markets may be more focused on short-term energy security and high oil prices, rather than on longer-term energy transition or environmental considerations, as detailed in the research we conducted in 2023, EM Sovereign Bond Spreads and Climate Risk: Will Correlations Grow Post COP28 Commitments?

"Our analysis suggests that markets may be more focused on short-term energy security and high oil prices, rather than on longer-term energy transition or environmental considerations. However, over time this may change as climate events occur, different natural resources come into focus, and renewable power brings energy security and independence to countries, which could impact credit quality and bond spreads."

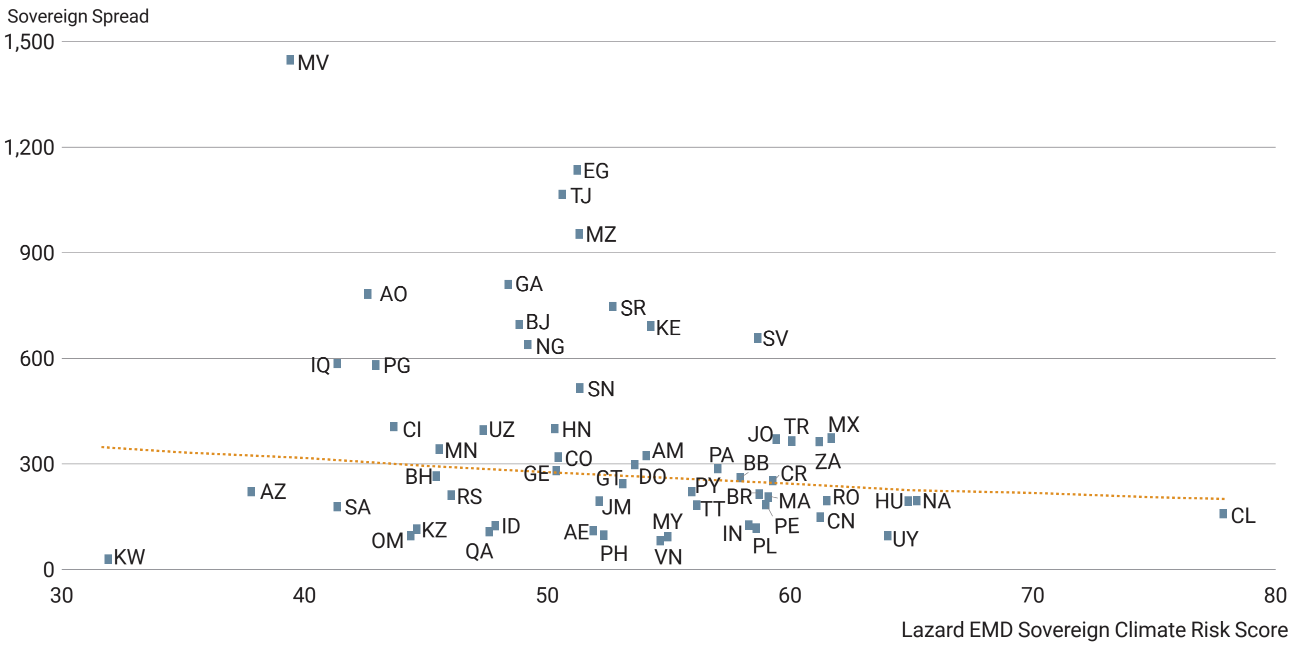

Denise Simon, Portfolio Manager, Emerging Markets Debt and
Rebecca Greenberg, Research Analyst, Sustainable Investment

Exhibit 9: Sovereign Willingness vs. Ability to Transition



As of 8 November 2023
For illustrative purposes only.
Source: Lazard

Exhibit 10: No Correlation Found between Sovereign Spreads and Sovereign Climate Risk Scores



As of 8 November 2023
For illustrative purposes only. Note: Country subindex spreads from the JP Morgan Emerging Market Bond Index Global Diversified (EMBIGD) Index. Distressed credits, defined as countries with spreads exceeding 1,500 basis points, are excluded.
Source: Lazard

Japanese Equity

In 2023, the Tokyo Stock Exchange (TSE) grabbed investor attention by introducing a series of policy initiatives aimed at holding corporate leadership to higher standards. We believe this is a positive shift that will drive value creation in the years to come, as our research suggests that board composition and diversity can lead to improvements in capital allocation, capital structure, and cost of capital. In this respect, we believe Japan must concentrate on improving director independence and female representation, two areas where it currently lags behind other developed markets. Over time, our hope and expectation are to see more independent boards with more female representation as well as more foreign representation, particularly in the case of multinational corporations. Given the nuances of corporate governance in Japan, we apply Japanese market-specific proxy voting guidelines in our global voting policy. In 2023, we made several enhancements to our policy framework to support our engagement efforts with Japanese companies.

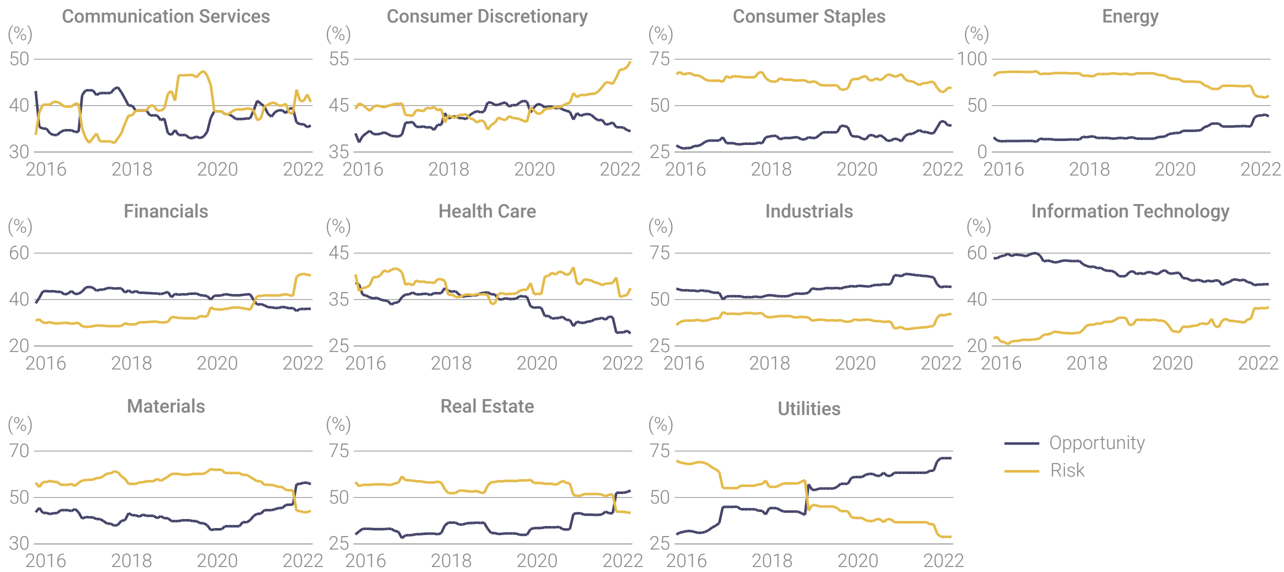
> "We believe that enhanced governance is directly correlated with a company's cost of capital in most cases. By improving governance, a company can reduce its cost of capital and increase its equity value. Specifically, we focus on board composition and diversity, as we believe these factors provide the essential framework for addressing crucial issues such as efficient capital allocation and optimal capital structure."

Tomomi Fukuta,
Senior Research Analyst, Japanese Equities, and
PhD Candidate in Diversity Management

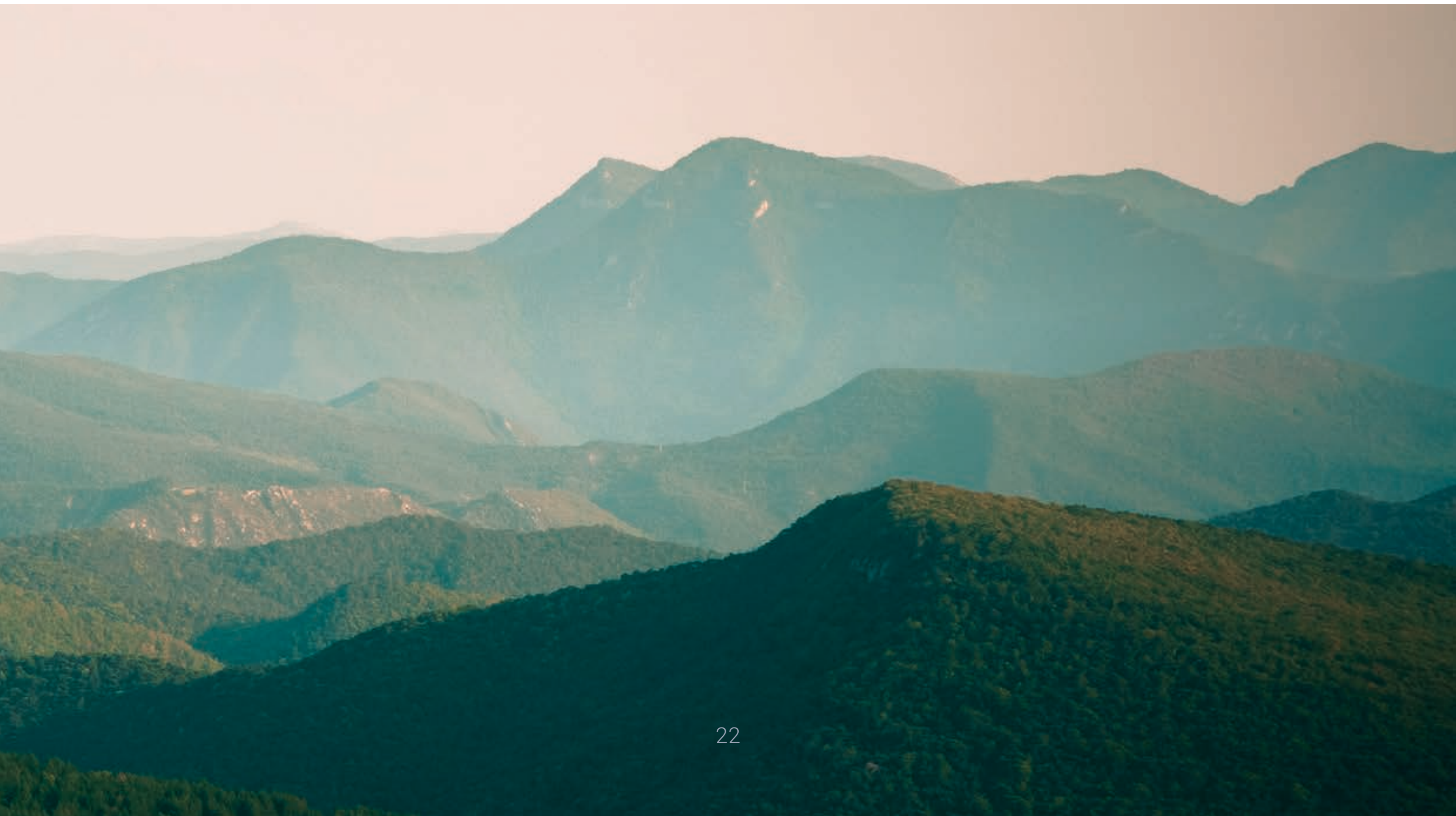
Quantitative Equity

Irrespective of industry, all companies face a wave of technological innovations that will create opportunities as well as costs—opportunities that their competitors may be the first to exploit. Our quantitative equity team has applied natural language processing techniques to companies' annual reports to seek to extract an objective measure of corporate attitudes towards the transition. Exhibit 11 shows the results for each sector based on US company constituents. Companies making misleading claims about their environmental impact expose themselves to potential litigation and reputational damage. Our forward-looking quantitative research is designed to allow us to have a more objective measure of greenwashing risk. This is calculated by comparing companies' promises in regulatory filings to real actions concerning their carbon footprint. Companies with large gaps between what they say versus what they do are deemed to be at high risk of greenwashing. The Lazard Quantitative Equity Sustainability Framework provides more insight into the nature or greenwashing risk and the methods we've developed to better understand it.

Exhibit 11: Company Discussions of the Climate Transition



As at 30 June 2022
Source: Lazard, 10-k filings



US Sustainable Equity

The US Sustainable Equity team believes that regulators, policymakers, consumers, and investors will increasingly favour companies that support a fairer, safer, and more sustainable future for the world's population. This is why the team seeks to identify companies positioned to capitalise on this structural shift, focusing on those businesses prioritising environmental stewardship, a social conscience, and good governance. The investment team's proprietary Sustainability Scorecard is designed to assess companies' financial strength (e.g. pricing power, margins, competitive advantages, reinvestment opportunities) and their relationships with stakeholders (e.g. with employees, customers, and communities) in order to identify the companies most likely to outperform. Over the course of 2023, the team engaged with several of their portfolio companies on material sustainability issues, ranging from living wages to net zero initiatives, which helped them have a more informed view of the company's sustainability and financial productivity profiles. Furthermore in 2023, our Stewardship team collaborated with members of the US Equity team on how Lazard's Global Proxy Policy is applied across US listed holdings, the firm's largest market in terms of voting volumes. This collaboration resulted in US-specific proxy voting guidelines, which we believe will help promote good governance.

> "Our strategy is designed to benefit from the shift towards products, services, and policies that focus on or support sustainability targets. We remain resolutely focused on identifying and assessing the sustainability factors that will meaningfully drive financial productivity."

Ross Seiden,
Portfolio Manager/Analyst,
US Sustainable Equity

Climate Action

The Lazard Climate Action strategy aims to capitalise on opportunities created by the transition to a low-carbon economy by investing in companies across the entire range of climate solutions. The investment team focuses on leading and innovative companies in both developed and emerging markets that have material and/or rapidly growing exposure to positive climate change actions—whether through mitigation or adaptation—and selects opportunities based on the quality of fundamentals and upside potential. Despite temporary headwinds, climate-related investments reached all-time highs in the first half of 2023, signalling a strong long-term growth potential for clean energy stocks, which make up a large portion of the climate action investable universe. The Lazard Climate Action team has been focused on capitalising on the attractive opportunities presented by the clean tech sell-off, as we believe the secular growth drivers in the climate action space are not fully reflected in today's valuations.

> "While temporary hurdles have led to a sell-off in the clean energy solutions space, we believe the potential for growing demand for clean energy solutions, an increasing commitment from governments and customers globally, and the resulting secular decrease in these technologies' cost structures should contribute to higher earnings momentum that is not reflected in today's valuations."

Monika Kumar,
Portfolio Manager/Analyst,
Climate Action

Active Ownership

Our Approach

We have a long history of engaging with companies. With over 20 years' average industry experience, our investment professionals have long-standing relationships with senior managements and other stakeholders, and a deep knowledge of the companies in which we invest. We believe that our investment professionals are the most relevant stewards to engage with company management and make the final decision on how to vote at company annual general meetings. Our stewardship approach seeks to align engagement and proxy voting, with investment decision-making at the heart of these interactions. Our dedicated Sustainable Investment team works in collaboration with our relevant investment professionals, providing additional subject matter expertise. Our overarching active ownership objectives are to:

1. Demonstrate the value of fundamental and quantitative research and their influence on voting decisions.
2. Evidence high-quality, outcome-oriented engagements that influence our investment decision-making and/or drive real-world outcomes.
3. Meet evolving stakeholder expectations and provide transparency on our stewardship activities. For further information about our stewardship policies and processes, several reports are available on our website.

Meetings

Company Meetings

Objective:

As an active manager, we seek regular dialogue with company management as an integral part of our fundamental research process. This allows us to understand company strategy, industry trends, capital allocation, and management quality.

Monitoring

ESG Due Diligence

Objective:

Meetings with company management that allow us to gain a better understanding of a company's approach to managing natural and human capital-related risks and opportunities.

Engagement

Engagements with a Tangible Outcome

Objective:

1. Investment outcome where there can be a change to our investment view, including valuation, or voting decision
2. Observable change/improvement in company or issuer practices that support real-world outcome

Our Global Governance Principles

The firm's view on corporate governance and accountability are set out clearly in our Global Governance Principles. The Principles provide a framework for engagement and voting, aligning with our overarching sustainable investment principles. They are founded on the belief that long-term shareholder value is enhanced through a more comprehensive assessment of stakeholder management.

Company Engagement Highlights

As noted at the start of this report, our key active ownership highlights over the year included an enhanced global voting policy, improved review of shareholder proposals, and improved tracking of engagement outcomes. Here, we highlight a few examples of our engagement efforts around the world in 2023—all of which correlate with a specific framework of our Materiality Map—and the outcomes of these engagements.

Example 1: Human Capital Engagement with a French Services Provider

Objective(s):

We met with a French services provider to discuss their progress towards their 2025 diversity, equality, and inclusion (DE&I) goals including the reporting of gender pay gap to include leadership, something we have discussed with them in previous engagements.

Details of Engagement:

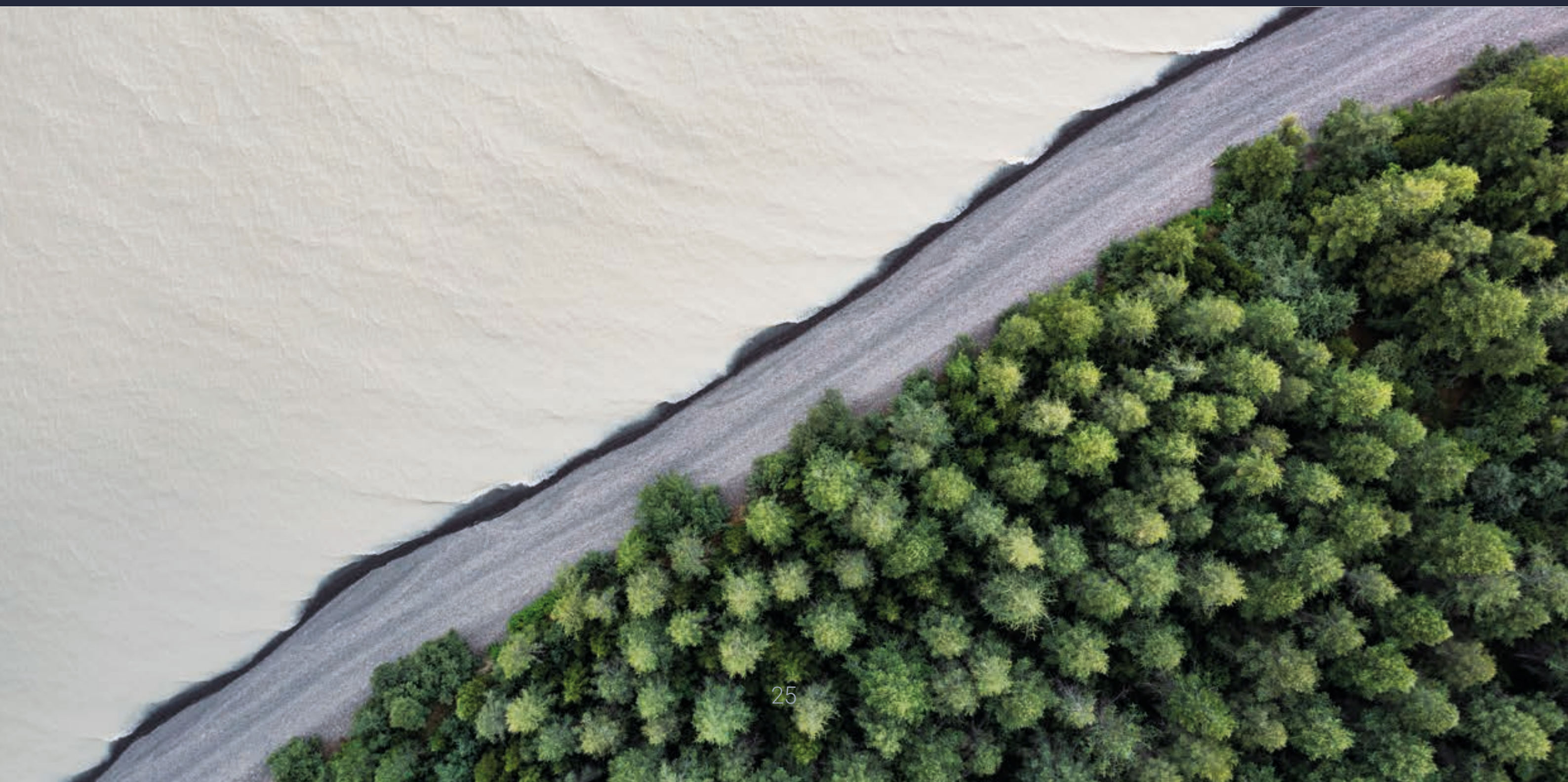
The company has seen an increase in female representation on the Board to 45% and on the Executive Committee to 33%, including a female CEO. It is on track to achieve its goal of 35% women in leadership by 2025, with 29% women in executive management positions and 26% in senior management roles. They also aim for 30% women in the workforce by 2025, a target which has remained stable at 30% since 2020. Goals also include 25% women in revenue-generating and STEM roles by 2025. Non-gender DE&I priorities include persons with disabilities, LGBT+, veterans, social mobility, and First Nations people.

The company's gender pay gap ratio improved to 0.97 in full-year 2022, with a target of zero pay gap by 2025. The company holds the Gender Equality European and International Standard (GEEIS) certification in Europe and aids clients in achieving independent third-party certification of DE&I practices.

Outcome and Next Steps:

The company expanded their reporting of the gender pay gap to include management, which was a key milestone of our engagement objectives. The gender pay gap itself is decreasing year-on-year and they are on track to achieve zero pay gap by 2025.

The company plays an important role in carrying out independent third-party certification of other companies' ESG credentials. We see strong structural demand for this service and are pleased that they hold the GEEIS certification to help their clients certify their DE&I practices. We intend to continue to track progress towards their 2025 representation and pay gap goals. In particular, we will track their goal of increasing the representation of women in revenue-generating roles, as we believe this is currently the most challenging to achieve.



Example 2: Governance Engagement with a European Industrials Company

Objective(s):

We proactively engaged with management to address concerns raised in a short-seller report about transparency, governance, and conflicts of interest, and determine if a change in our investment strategy was needed.

Details of Engagement:

Over the course of 2023, we engaged directly with the company on four occasions and participated in group investor calls. In our meetings with the CEO, Chairman, Investor Relations, and Chair of the Nominations Committee, we discussed potential conflicts of interest between the company and the Chairman's investment business, concerns about the lack of disclosure, including the rationale for mergers and acquisitions (M&A) and their alignment with broader strategy, as well as board independence and the replacement of three Non-Executive Directors who stepped down before the Annual General Meeting (AGM). We encouraged enhanced disclosure and rebuilding trust in corporate governance. Specifically, we suggested the company:

- Provide an explanation for the board changes and the departure of three non-executive directors before the AGM.
- Commit to a timeline for replacing the board members, ensuring sufficient independence.
- Consider conducting an independent board evaluation after the refreshment process.
- Enhance disclosures regarding M&A, improve reporting on related-party transactions, and provide clarity on accounting practices related to R&D.

Outcome and Next Steps:

The company appointed two independent directors in November 2023. Although we acknowledge that further improvements are needed, we believe that the market has overly discounted the stock. We are encouraged by management's commitment to strengthening both disclosure and governance moving forward, and our investment view remains the same.

Example 3: Governance Engagement with a North American Media Company

Objective(s):

In 2023, we met with Investor Relations to discuss corporate governance changes, including the splitting of Chairman and CEO roles, the return of the former CEO, and CEO succession plans. We also reviewed previous requests for more transparency on how it manages employee retention and competitive pay.

Details of Engagement:

The company has established a succession planning committee consisting of non-executive directors with CEO experience to ensure the next candidate has the relevant skill set. We requested clear succession timelines and discussed employee attraction and retention across different business segments. Following previous engagements, we sought improved reporting on employee retention, which the company confirmed will be included in their 2024 sustainability disclosures.

Outcome and Next Steps

The insight shared about the succession plans will feed into our wider analysis ahead of the AGM and how we decide to vote. The progress made on enhancing employee policies and retention and implementing the specific changes requested fed directly into the sector analyst's sustainability scorecard review, resulting in an improved management score for employees.

Example 4: Natural Capital Engagement with a North American Mining Company

Objective(s):

Company management initiated a discussion with us about the strategic opportunities emerging from the energy transition.

Details of Engagement:

Management noted that they were considering the strategic direction they wanted to pursue in terms of capital investment as they were aware of the demand for the different types of metals that the energy transition is driving. The management team noted that their Board of Directors was also trying to understand how investors were valuing certain assets, one of which is the primary driver of our investment thesis in this company. We discussed why we see value in these assets as well as the research on supply, demand dynamics, technological uses, and geopolitics that drive our investment view.

Outcome and Next Steps:

Approximately two months after our correspondence, the company updated its strategic plan noting increased investment and the restart of an asset related to the energy transition.

Example 5: Natural and Human Capital Sovereign Engagement with a Sovereign Issuer

Objective(s):

Analysts from our Sustainable Investing, Global Fixed Income, and Emerging Markets Debt teams met with the country's Director of Public Credit and National Treasury and Deputy Director of External Funding and Investor Relations to discuss the country's revised sovereign green, social, and sustainability framework.

Details of Engagement:

The expanded framework aims to fund green projects from a mix of financing sources. The government has identified nearly $4 billion of eligible social projects, and expects that over time, sustainable bonds will account for a larger proportion of external issuance. Market conditions will determine the timing of issuances. The country's sustainable bond framework is publicly available online, and the Moody's ESG team will provide a second-party opinion before the first bond is issued under this framework.

Outcome and Next Steps

The engagement with government officials revealed the country's commitment to funding green and social projects, aiming to reduce poverty, inequality, and disparities between urban and rural areas. The energy targets align with the country's NDCs, UN SDGs, and global sustainability standards. Monitoring the implementation and progress towards these goals, as well as detailed disclosures about benefitting communities, will be crucial in understanding the initiatives' impact.

Stewardship Statistics

Direct Engagement

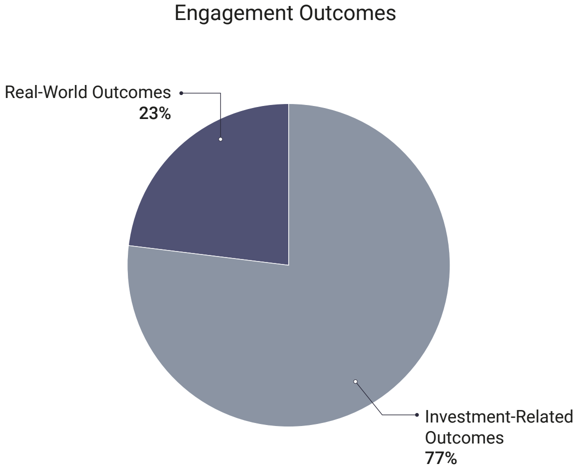
As a firm we have typically participated in around 4,000 company meetings globally per year. Below are the ESG engagement and meeting statistics from 2023.

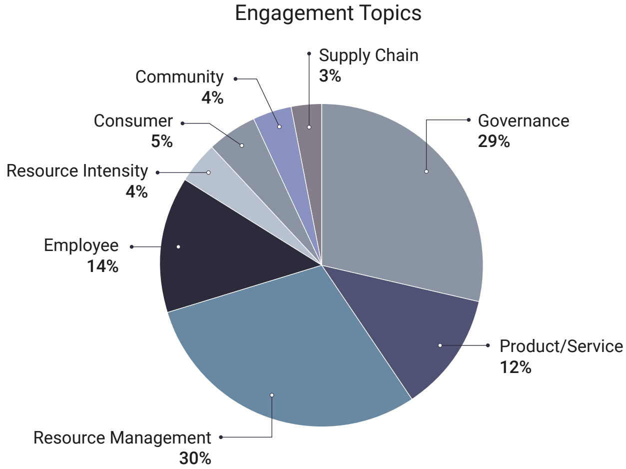
4,276
Total company meetings

1,051
Due Diligence Meetings

254
Tangible Engagement Outcomes

New Insights Collected in 2023





Voting

2023	Emerging Markets	Europe	Other	United Kingdom	United States	Total
Total number of meetings	1,919	656	1,066	272	1,624	5,537
Meetings voted	1,892	575	1,058	270	1,620	5,415
Meetings voted 100% with management	1,088	282	565	216	652	2,803
Meetings with one or more against management	804	293	493	54	968	2,612
Meetings not voted (share blocking) (%)	58	49	53	80	40	52
Meetings with one or more abstentions (%)	42	51	47	20	60	48

59%
Shareholder resolutions supported in 2023

47%
Meetings where we voted against management in one or more proposals

Wider Influence

Industry Involvement

In 2023, we participated in several industry events including COP 28, the largest global climate conference of 2023, the Financial Times' Future of Asset Management event, and the Mercer 2023 UK Pensions Investment Conference. We also hosted a series of events for clients, aimed at providing insights and education on the rapidly evolving sustainable investment space. These included:

Lazard speaks at Deloitte Corporate Governance panel event

Roland Bosch, Governance Analyst, joined Deloitte for a panel discussion on corporate reporting reform proposals and the fast-evolving ESG reporting landscape. Alongside a group of key stakeholders, he discussed views on the current quality of corporate reporting, the corporate reporting proposed reforms attestation statements, and, more broadly, what is most important for users of financial statements and results announcements.

Climate and Energy Transition Conference

In April 2023, Lazard hosted its inaugural climate and energy transition conference. The all-day event—attended by more than 150 corporate leaders, investors, policymakers, and economists—provided a unique forum to discuss the financial impacts, opportunities, and risks of climate change and the energy transition.

Biodiversity Data Client Roundtable

In June 2023, we hosted a client event on the topic of biodiversity data. The discussion explored how we can translate biodiversity into an investment framework, how corporates and investors are managing expectations for The Taskforce on Nature-related Financial Disclosures (TNFD) reporting, and the importance of engagement with companies. The accompanying report, Biodiversity Data: Is It Fit For Purpose?, helps shed light on how data collection and reporting standards are evolving.

Mercer 2023 UK Pensions Investment Conference

In September 2023, Jennifer Anderson spoke on a panel for the "Investment Stewardship: from Ambition to Action" session at the Mercer 2023 UK Pensions Investment Conference. During the session Jennifer spoke about the importance of linking engagement to investment decisions, the differences between active and passive managers relating to engagements, and Lazard's active ownership processes and reporting.

FT Future of Asset Management

In November 2023 Jennifer Anderson participated in a panel discussion on net zero, the energy transition, and the role of asset management.

UN Climate Change Conference, COP 28, United Arab Emirates

In December 2023 Lazard CEO Peter Orszag and representatives from both the LAM Sustainable Investment team and Lazard Climate Center attended COP 28, the largest global climate conference of 2023. In addition, Lazard hosted an exclusive in-person event in the COP 28 Blue Zone, convening corporate leaders, investors, global thought leaders, and public sector decision-makers to address the pressing challenges faced by global economies in the face of climate change and geopolitical instability.

EMIA Panel with Conservation International

In December 2023 Rebecca Greenberg moderated a panel discussion on priorities for marine biodiversity protections in Brazil.

Thought Leadership

We produce regular thought leadership on sustainability topics, providing our clients and broader stakeholders greater transparency on how these important topics are evaluated in our research and decision-making process for Sustainability-Focused and ESG Integrated strategies. Our most recent thought leadership is highlighted below and also available on our website.

Active Ownership Report

Our Active Ownership Report details the rigorous, active investment approach underpinning our four Sustainable Investment Principles, including a look at the role of relevant investment professionals within the voting and engagement process through case studies and a quarterly spotlight featuring one of the firm's portfolio management teams.

Introducing the Lazard Quantitative Equity Sustainability Framework

Our quantitative team details the framework they have developed designed to better understand and assess greenwashing risks. This forward-looking framework aims to assess operational risks and net zero pledges while addressing greenwashing by tracking environmental promise-performance gaps.

Biodiversity Data: Is It Fit for Purpose?

This paper explores the biodiversity data landscape, including a review of the datasets that are available and relevant to investors. We explore three key use cases of these datasets as ways to offer a high-level overview of a portfolio's exposure to biodiversity; support bottom-up fundamental research; and monitor corporate disclosures and support early-stage company engagement.

The Road Ahead

Jennifer Anderson,
Managing Director,
Global Head of Sustainable Investment

There are three themes we are monitoring: election cycles, engagements with companies, and the ongoing push for sustainable investment solutions.

Elections

This year marks the biggest election year on record, with over 50% of the world's population going to the polls in 2024. The outcome of elections could have significant implications for global sustainability policies, perhaps most notably within the United States, where the Inflation Reduction Act continues to drive funding and incentives toward the clean energy transition, but eyes will also be on outcomes for the European Parliamentary elections, which have historically taken a strong leadership position on climate policy and may see some voter opposition to green policies which are considered expensive for industry and consumers. We continue to monitor the changing policy landscape, with an eye to policy changes that stand to impact portfolio companies.

Engagement

Against a backdrop of continued uncertainty—driven by geopolitical tension, market volatility in a higher-for-longer rate environment, and uncertain election outcomes—we believe active managers can use ongoing engagements with companies to seek to identify potential alpha opportunities. Our interactions with company management help to ensure we have the latest insight into how companies are navigating regulatory uncertainty and subsequent changes to corporate strategy, including the publication of transition plans and stakeholder management strategies designed to ensure business resilience.

Sustainable Solutions

Despite the well-known complexities and politicisation of this field, we continue to see demand for sustainable investment solutions—whether active or quantitative. We continue to focus on our sustainability offerings, including the launch of new products such as the Sustainable Private Infrastructure fund (private equity) and our existing sustainability-focused products, such as the Global Sustainable Equity strategy and Climate Action strategy. We believe these strategies help address global challenges including social inequalities like access to healthcare and climate change.

> "In the biggest election year ever, outcomes at the polls could have significant implications for global climate and wider sustainability policies. As active investors, we continue to analyse the changing policy landscape to ensure we are investing and engaging with the companies we believe are best-positioned for success."

This content represents the views of the author(s), and its conclusions may vary from those held elsewhere within Lazard Asset Management. Lazard is committed to giving our investment professionals the autonomy to develop their own investment views, which are informed by a robust exchange of ideas throughout the firm.

Notes

1 Strengthening and expanding EU Emissions Trading (European Commission, 2023)
2 "You've probably heard of Scope 1, 2 and 3 emissions, but what are Scope 4 emissions?" (World Economic Forum)
3 www.weforum.org/agenda/2023/02/low-carbon-investment-record-2022/
4 www.weforum.org/agenda/2023/05/renewable-energy-incentives-households-countries/
5 Inflation Reduction Act (United States Department of the Treasury, 2022)
6 Critical Materials: Geopolitics, Interdependence, and Strategic Competition (Lazard Geopolitical Advisory, 2023)
7 Introducing the Critical Minerals Policy Tracker (International Energy Agency, 2022)
8 Lazard Levelized Cost of Energy (Lazard, 2023)
9 Hottest July ever signals 'era of global boiling has arrived' says UN chief (United Nations, 2023)
10 Billion-Dollar Weather and Climate Disasters (National Centers for Environmental Information, 2024)
11 Deloitte research reveals inaction on climate change could cost the world's economy US$178 trillion by 2070 (Deloitte, 2022)
12 Changing climates: the heat is (still) on (Swiss Re, 2024)

Important Information

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