Global Equities Fund

ESG Engagement Report: January 2023—June 2023

During the first half of 2023, the Global Core Equity team's portfolio managers and analysts engaged with the senior management and/or boards of directors of companies held by Global Core Equity. In the six-month reporting period ending June 30, 2023, we conducted 59 engagements with 39 distinct companies across a range of material ESG risks and opportunities, including energy- and water-management practices, modern slavery risk, and engagement for action around executive compensation.

Research is the core of investing at AB, and we believe that consideration of material ESG factors can drive better research and outcomes for clients. It's important to engage directly with company management to understand the material ESG factors a company faces and incorporate them into the risk/return assessment for securities we analyze. As active investors, we also use engagement to encourage firms to advance their business activities and practices to better manage these material risks and opportunities.

In the Appendix is a full summary of our engagements in each ESG category during the past 12 months ending June 30, 2023. Summary reports of a selection of our engagements with companies during the six-month period follow.

Example Engagements on Environmental Issues

Cheniere Energy (energy). During the period, we met twice with the management of Cheniere Energy to understand better how the company is navigating the opportunities and risks of a green transition. Cheniere Energy is a leading producer of liquified natural gas (LNG), headquartered in Houston, Texas.

Cheniere Energy believes that LNG is a key component of the energy transition through three use cases: displacement of dirty fuel, partnership with renewables and delivery of hydrogen. Energy supply is essential, and hydrogen, wind and solar alone cannot address the energy shortage. One cargo of LNG provides enough energy for 2 million people per month. Cheniere Energy provides two cargos a day. LNG also generates 50% fewer emissions than coal. The company expects LNG, as it is more reliable than renewables and more environmentally sustainable than coal, to be a foundational fuel through 2050 and beyond.

Although nearly 75% of its emissions come from downstream combustion activity, Cheniere Energy is focusing on the remaining 25% of emissions, where it has direct control of liquefaction emissions and indirect control of upstream emissions. Data collection is a central tenant of the company's emissions-reduction strategy. Cheniere Energy is collaborating with partners across the value chain to generate actionable, accurate data that can inform strategic and cost-effective mitigation efforts.

Cheniere Energy is partnering with the University of Texas to create the Life Cycle Assessment (LCA) model, which facilitates migration from engineered estimates to a science-based profile of emissions throughout stages of the supply chain. Cheniere Energy emphasized the intensity of the studies, which include repeating aerial snapshots of super emitters that support the model. The company publishes all of its learnings through peer-reviewed journals to help others build emissions-reduction frameworks.

One such publication revealed that Cheniere Energy's Sabine Pass LNG supply chain, from production in the US to delivery in China, has greenhouse gas (GHG) emissions intensities that are 30%–43% lower than other analyses employing national or regional average emissions profiles. The segments driving these differences are gas production and gathering, transmission, and ocean transport. This first-of-its-kind, supplier-specific LCA enables Cheniere Energy, along with peers, to isolate where to act and what steps to take to reduce emissions effectively and efficiently. The company is collaborating with natural gas suppliers to develop a quantification, monitoring, reporting and verification program at scale to complement the LCA model.

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Source: AB

As of 2022, Cheniere Energy is using data from the LCA model to provide customers with Cargo Emissions Tags that show the calculated emissions from the wellhead to the delivery point associated with each cargo and aid customers in their emissions-reduction journey.

Beyond data collection, Cheniere Energy is exploring technologies that can reduce emissions from liquefaction at its two sites, Sabine Pass and Corpus Christi. Sabine Pass has six off-grid trains that are powered by gas-fired turbines. To power the operations via renewables, Cheniere Energy explained that it would have to build a 1,000-watt power plant. Such a renewable energy project is cost prohibitive. The company is exploring different opportunities, such as pre-combustion carbon capture at Sabine Pass. The chief financial officer noted that the Inflation Reduction Act (IRA) makes carbon capture financially viable. Corpus Christie is another story, as it is near miles of wind farms. Although it uses gas for the three existing trains, the seven mid-scale trains under construction will be electric driven. Cheniere Energy is looking to integrate more renewables via power purchases from utilities upstream to ensure reliability.

The Global Core Equities team admires Cheniere Energy's broad-sweeping yet granular analyses of its emissions profile, supply chain partnerships, efforts to decarbonize direct operations and support of customers' decarbonization. Nevertheless, Cheniere Energy has yet to set targets. Throughout our discussions, we have asked the company to consider setting targets for at least Scope 1 and 2 emissions. Cheniere Energy shared that it will set a methane target in the next three years. The AB Responsibility team indicated that the company maintained a methane intensity rate of less than 0.02% annually over the past five years, which is below the Oil and Gas Climate Initiative target of 0.2%. However, the Global Core Equities team would like to see more GHG target setting moving forward and will continue to check in accordingly.

We currently penalize Cheniere Energy +5 basis points (bps) for environmental concerns, +10 bps for social concerns and reward 0 bp for their governance approach.

Iberdrola (utilities). Iberdrola is a Spanish multinational electric utility company that specializes in clean energy. During the period, we met with the management of Iberdrola twice to understand the company's environmental risks in its supply chain.

Wind and solar photovoltaic (PV) technologies require the mining of base, precious and minor metals. The supply of these metals is currently insecure and will be in increasing demand moving forward. Although the mining and processing of these materials are critical to generating clean energy, they present environmental and social risks, such as water, biodiversity and modern slavery risks. Underground and open-pit mines and their extensive infrastructure disrupt habitats, often in remote and environmentally sensitive areas. Managing biodiversity risks necessitates mitigating the initial disruption of biodiversity and subsequent restoration initiatives. Mining, especially precious metals, requires large volumes of water, and toxic waste and mine effluents can enter water systems and spread. The European Union (EU) industry relies on imports for many of these raw materials, sometimes from countries with poor levels of governance that might lack sufficient social safeguards. Furthermore, the regulatory landscape offers competing views of mining activities. The EU taxonomy currently does not consider metals and mining a green-enabling activity, while the Green Deal Industrial Plan, Europe's response to the IRA, recognizes metals and mining as necessary to the transition.

Given the competing ESG considerations and regulatory perceptions of the supply chain for clean energy, we wanted to ensure Iberdrola (i) has a reliable supply of raw materials at a reasonable price, (ii) is promoting good governance around environmental and social risks stemming from mining activities, and (iii) is exploring technological innovations to reduce its reliance on certain metals. Iberdrola assured us that it has a secure supply of raw materials for wind energy, as roughly 70% of procurement needs are already contracted at a fixed price for the coming years. The biggest challenge to wind production is permitting. Solar PVs from China are in heightened demand, but Iberdrola has visibility on 100% of supply into 2023, 70% into 2024 and 40% into 2025.

Solar PVs from China present an increased risk of forced labor. Although Iberdrola can only engage and audit direct suppliers, Iberdrola includes an additional clause in supplier contracts to ensure that no products are from Xinjiang. The company emphasized that supply chain traceability and accountability are sector-wide initiatives.

We asked for more disclosure on where raw materials are sourced, the risk profiles of these raw materials, and how the ongoing screening of and engagement with suppliers is conducted to manage risk exposure. We also asked Iberdrola to share what new technology it is developing to become less dependent on these raw materials. Iberdrola noted that it is working on blade recycling, green steel and green ammonium.

Iberdrola was receptive to our feedback and even reached out following our discussions to request our feedback in writing so

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that it could be relayed to the Board for consideration ahead of Iberdrola's 2023 General Shareholder Meeting. We look forward to monitoring Iberdrola's progress and continuing our dialogue.

We currently penalize Iberdrola 0 bp for environmental concerns, 0 bp for social concerns and 0 bp for environmental concerns.

Carlsberg (consumer staples). We engaged with Carlsberg's investor relations and head of sustainability during the period to encourage water-management and regenerative agriculture efforts throughout the supply chain, given the company's exposure to water risks in China. Carlsberg is a multinational brewery group headquartered in Copenhagen, Denmark.

Since 2015, Carlsberg has reduced its water use from 3.6 hectoliters (hL) to 2.5 hL per hL of beer produced. The company targets a reduction in water usage to 2.0 hL/hL globally and 1.7 hL/hL for breweries in high-risk areas by 2030.

Carlsberg's revenue from its China businesses accounts for the majority of its revenue in Asia. Twenty-six of its 40 Asia-based breweries with a capacity of more than 100,000 hL are in China. Although Carlsberg has a best-in-class water waste profile, the increasing water scarcity challenges in China require enhanced oversight. The Chinese government has implemented variable pricing to ration water, in which the driest regions pay 3.5 times that of the wettest regions. Carlsberg's volume-weighted water stress is expected to increase by 26% by 2030 in China, which may affect the company's cost of goods sold and capital expenditure.

In 2022, Carlsberg achieved 31% in water reduction, beating its 25% reduction target for the year. Over the past five years, the company has interviewed employees across all markets and levels of seniority on how to integrate ESG into business practices. At its Liangping Brewery in China, Carlsberg asked brewery workers for their water-saving solutions. More than 80 ideas, from water-loss elimination to recovery to reuse, inspired actions that contributed to a 26% reduction in water usage in two years and an efficiency rate of 2.0 hL/hL in 2022 at low to virtually no cost. The head of supply chain at Dazhulin Brewery did a similar exercise, the learnings of which will be rolled out across other high-risk brewers in Asia throughout 2023. The company plans to increase efficiency in line with growth to maintain its license to brew.

Carlsberg also is developing a water-replenishment strategy. Although Carlsberg has yet to encounter variable pricing, it is taking an early defensive position. By replenishing water in addition to increasing efficiency, Carlsberg hopes to build a track record of water neutrality and avoid culpability for water scarcity and consequent subjection to government-imposed water rations.

The company is starting its first partnership to conduct large-scale replenishment in China, the details of which will be announced soon. Moreover, Carlsberg is innovating other mechanisms to save water, including nature-based solutions. As part of its new ZERO Farming Footprint ambition, the company has introduced regenerative agricultural practices that will promote healthy soils and thereby enhance water retention and, more broadly, water management further up the supply chain.

A signification portion of Carlsberg's beer sold in Asia is made from rice, so the company is studying rice production across three dimensions: carbon, water and socioeconomics. In one experiment, the company stopped flooding a 100-hector rice field in Laos. The results included a three times higher yield, reduced water waste, reduced methane levels by slowing decomposition and lower cost by decreasing the amount of fertilizer needed. The company is exploring how to improve outcomes further, scale regenerative agricultural practices across smaller, independent farmers, and leverage the existing scale of major maltsters.

Carlsberg agrees with us that water risks require oversight, and it is addressing these risks actively. We look forward to learning more about the company's new water-replenishment program in China and will continue to monitor the company's progress in other water-conservation initiatives along the supply chain.

We currently penalize Carlsberg 0 bp for environmental concerns, 0 bp for social concerns and +20 bps for environmental concerns.

Example Engagement on Social Issues

Takeda Pharmaceutical (healthcare). Takeda Pharmaceutical is a global biopharmaceutical company based in Tokyo, Japan. We engaged with the investor relations of Takeda Pharmaceutical during this period to assess product safety and quality in clinical trials.

Takeda Pharmaceutical is leveraging digital tools to begin conducting remote clinical trials to recruit more diverse participants in response to the lack of diversity in the clinical trial population. With digital tools, the company hopes to mitigate social barriers that negatively affect diversification, such as distance to health research centers and language barriers, and enhance treatment efficacy for a broader patient population. Takeda translates materials into 30 languages and is partnering with community stakeholders to help advance health equity. Its

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digital initiative also will enable the company to improve efficiency, increase participation retention and reduce costs.

A key risk for remote trials stems from product safety and quality. We advocated for Takeda to adopt appropriate measures (oversight, culture of safety and signal detection) for maintaining safety throughout remote trials. Takeda Pharmaceutical is building a backbone internally for data management to ensure the "last mile" of patient care is overseen effectively. The company assured us that if quality and safety cannot be maintained remotely, the trial will be conducted in person. The company established an ethics committee and a threshold for assessing issues related to product safety and quality. The US Food and Drug Administration also examines all trials for approval before they can occur.

The company emphasized that it has a patient-centric, speak-up culture. Takeda Pharmaceutical communicates its core organizational values to the public, which are aligned with the principles of conduct of clinical trials by the Pharmaceutical Research and Manufacturers of America. We were particularly interested in how the company made them actionable in day-to-day decisions. It emphasized that its "patient-trust-reputation-business" is not just a slogan but also an internal way of being. The company shared an anecdote that in every meeting room in its UK office, there is a red cushion in one chair that represents a patient. This way, patients are "present" in each meeting and their safety remains central to decision-making.

By leveraging remote trials, Takeda Pharmaceuticals hopes to attract greater global representation for its clinical trials. Broader representation could be helpful as the company continues to pursue vaccine development for mosquito-borne diseases. Climate change is increasing the global reach of such diseases. Takeda Pharmaceutical just received approval for a dengue vaccine; the company noted that this vaccine might be the most consequential drug that Takeda Pharmaceutical has ever launched, as half the world's population is at risk of dengue. The company is studying where upcoming dengue outbreaks will be and offering its conclusions to governments in endemic areas as a tool to support vaccine distribution. The company is also in the process of developing a Zika vaccine.

We admire Takeda Pharmaceutical's ambition to have a more diverse representation in clinical trials and are mindful of the risks inherent to remote trials. The company appears to be managing the risks responsibly. We will continue to monitor how safeguards evolve as more trials become remote.

We currently penalize Takeda Pharmaceutical 0 bp for environmental concerns, +15 bps for social concerns and 0 bp for governance concerns.

Example Engagement on Governance Issues

SAP (technology). We engaged with SAP, a German enterprise software company, to follow up on our last engagement with the company during the fourth quarter of 2022. Previously, we advocated for the company's sale of Qualtrics to reduce exposure to stock-based compensation, de-consolidate reporting and make pro forma guidance more reliable.

In 2021, average personal expenses for each employee grew to approximately €149,000 (while in 2020 they were €132,000). According to SAP, this increase was primarily due to an increase in share-based payment expenses. Despite this increase, SAP's guidance remained unchanged.

Given that SAP's peers, such as Adobe and Microsoft, have been decreasing stock-based compensation (SBC), we asked SAP what was inspiring the company to go in the opposite direction. SAP explained that this hike was related to the acquisition of Qualtrics. The acquisition involved a three-year SBC deal with a high share of equity that will decrease over time. SAP reverse engineered about half the SBC related to Qualtrics. When the program expires in 2023, half of it will be settled in cash in 2024. More SBC is being utilized, as there is a disparity between legacy SAP employees and new SAP employees from the acquisition. Legacy employees were given the option to select SBC in bonuses and awards. SBC also was part of a pandemic program where employees could purchase SAP shares at a discounted price. In our initial engagement, we shared that the use of SBC seemed excessive and advocated for more transparent reporting, as other mature companies, like Microsoft, report SBC. SAP defended excluding SBC from reporting as a way to highlight growth. However, this exclusion limits investors' visibility regarding SBC and makes pro forma guidance less trustworthy. SAP acknowledged that Qualtrics was a surprise to investors, and it missed guidance in 2024. We asked SAP if it would consider selling some of its stake in Qualtrics to de-consolidate reporting and present clearer, SAP-specific guidance.

SAP released in its 4Q:22 update at the end of January 2023 that it was looking to sell its stake in Qualtrics. At our follow-up engagement, SAP noted that this decision was inspired in part by investors' disapproval of the acquisition and excessive use of

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stock-based compensation. We appreciate that SAP took our feedback, in addition to that of other investors, seriously.

We currently penalize SAP 0 bp for environmental concerns, +5 bps for social concerns and 0 bp for governance concerns.

Please refer to the following legal disclosures.

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Appendix

Engagement Statistics* for the 12 Months Ending June 30, 2023

Details regarding AB analysts' engagements within each ESG category for Global Core Equity are provided below.

Theme/Category	Engagements
Environmental	
Biodiversity & Land Use	6
Carbon Emissions	37
Climate Change Vulnerability	2
ESG-Labeled Bonds	4
Net Zero	13
Opportunities in Clean Tech	11
Opportunities in Renewable Energy	7
Packaging Waste	5
Product Carbon Footprint	5
Resource Management	6
Supply Chain - Environmental	13
Toxic Emissions & Hazardous Waste	1
Water Management	11
Other	6

Social	
Diversity & Inclusion	31
Employee Health & Safety	12
Financial Product Safety	2
Human Capital Development	29
Insuring Health & Demographic Risk	1
Labor Management	18
Modern Slavery	3
Opportunities in Education	1
Opportunities in Financial Inclusion	4
Opportunities in Healthcare	3
Opportunities in Nutrition & Healthier Products	3
Privacy & Data Security	10
Product Safety & Quality	10
Responsible Investment	3
Stakeholder Engagement	2
Supply Chain - Social	8
Other	5
Governance	
Accounting	1
Anti-Competitive Practices	1
Board Independence	11
Board Level Diversity	6
Business Ethics	5
Combined CEO Chair	2
Corruption & Instability	1
Crisis Management	2
Entrenched Board	9
One Share One Vote	6
Organizational Culture	12
Pay	42
Other	14

* All engagement statistics are based on the previous 12 months and reflect the absolute number of engagements with individual issuers during the period. Multiple key issues may be discussed during one engagement. The topics and number of engagements are subject to change in the future.

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