Contributors

JONATHAN BAILEY
Head of ESG Investing

STEVE RUH, CFA
Co-Director of Non-Investment Grade Credit Research

RACHEL YOUNG
Co-Director of Non-Investment Grade Credit Research

STEVE FLAHERTY, CFA
Director of Investment Grade Credit Research

KELLY WEBER, CFA
Senior Research Analyst, Investment Grade

GREG MAGNUSON, CFA
Senior Corporate Analyst, Emerging Markets Debt

MANUEL GUERENA GANDARA
Senior Corporate Analyst, Emerging Markets Debt

DOREEN SAIK
Senior Corporate Analyst, Emerging Markets Debt
Global Corporate Credit ESG Engagement Report

Environmental, social and governance (ESG) risks continue to impact the global credit markets, and over the last year investors have had to contend with ESG risks ranging from environmental incidents, money laundering allegations and unethical healthcare pricing practices to new and evolving risks such as cyber security. As we discussed in our inaugural ESG Fixed Income Engagement Report last year, these risks can have a material impact on an issuer’s credit profile, cost of capital and ultimately the performance of a portfolio. Engagement with issuers remains an important tool, not only to identify and better understand ESG risk factors, but also to set objectives with issuers that we believe will reduce credit risk and promote positive outcomes for people and the planet.

Consistent with Neuberger Berman’s commitment to firm-wide collaboration on ESG, we have incorporated the engagement activities of our Emerging Markets Corporate Credit research team within this year’s report and expanded the scope to global corporate fixed income markets. We are proud to report that our global corporate fixed income team conducted 984 issuer engagements covering 1,450 ESG-related topics between July 1, 2018 and June 30, 2019. Within this paper, we provide an update on our engagement activities, discuss how we prioritize our engagements with issuers and describe recent engagement trends. Our highlighted case studies provide insight into the framework we use to engage with issuers on important ESG topics to promote positive outcomes for creditors and broader stakeholders.

GLOBAL FIXED INCOME IS AN IMPORTANT PLATFORM FOR ENGAGEMENT

As of year-end 2017, the $100 trillion global fixed income market¹ was 15% larger than the global equity market.² This scale and reach provides bondholders with a powerful voice when engaging on ESG topics and the ability to meaningfully impact the credit quality of the markets and broader corporate behavior. Yet in comparison to the amount of time, resources and attention focused on engagement, fixed income investors have historically lagged behind their equity peers. If we seek to generate positive outcomes, then it is incumbent on fixed income investors around the world to engage with issuers on important ESG topics more frequently.

¹Bank of International Settlement (BIS). Data for the calendar year 2017.
ESG Analysis Is a Key Component of Credit Research

Fixed income investment teams are responsible for integrating ESG analysis into the investment process. The systematic but decentralized approach provides investment professionals with the flexibility to analyze issuers on ESG criteria that they view as most significant to the credit profile of an issuer. Direct engagement with issuers is core to our systematic engagement process. When paired with other inputs, it creates a feedback loop that allows investment teams to evolve methodologies and prioritize ESG risks that they believe are most relevant to an asset class and sector.

As part of this process, our investment teams utilize a wide variety of inputs that seek to create a feedback loop of continuous improvement:

CORPORATE DISCLOSURE AND ANALYSIS
Neuberger Berman’s global credit research team utilizes available corporate disclosures to identify potential areas of controversy.

DIRECT ENGAGEMENT
Neuberger Berman’s proprietary ESG scores focus on sector-specific factors that are the largest drivers of credit risk within each sector. Our research analysts directly engage with issuers on their ESG policies, and we encourage issuers to make enhancements to their policies and actions when needed. The breadth and scale of our research platform is a powerful resource for engagement.

BIG DATA ADVANCED ANALYTICS
Neuberger Berman’s data science team utilizes advanced analytics to track and measure unique data sets that augment the traditional analysis performed by investment teams.

THIRD-PARTY DATA RESOURCES
In addition to company-related disclosures, credit research analysts utilize third-party data providers as additional resources to measure performance, policies and targets.
Neuberger Berman’s global corporate fixed income platform has worked closely with our central ESG Investing team to develop a proprietary fixed income-specific ESG scoring framework that we believe provides our investment teams with the tools to evaluate issuers on ESG factors that are material to the credit quality of an issuer:

- **Industry Assessment**: As a starting point, investment teams identify material ESG factors for an industry using a variety of tools, including the Sustainability Accounting Standards Board (SASB) criteria. We believe SASB provides an excellent initial set of industry-specific factors; however, not all factors identified by SASB are relevant for fixed income investors, and in some cases investment teams will add additional criteria. Investment teams customize the scoring criteria for asset classes and sectors based on their expertise and analysis.

- **Issuer-level Assessment**: Investment teams develop a unique score for each issuer on an industry-relative basis against each material risk factor. Scoring is assessed after the evaluation of company-reported resources, specialized data and third-party research. Neuberger Berman uses a variety of sources that range from widely available company reports to smaller, more unique data sets. For example, sectors that are highly exposed to regulatory changes, such as the U.S. utilities sector, incorporate data from the CPA-Zicklin Index, which measures a company’s disclosure on election-related spending. Direct engagement is a critical component of issuer-level assessment by giving investment professionals a deeper understanding of issuer-specific ESG risk factors and providing a medium to promote advancement on ESG topics.

The frameworks we use are customized by sector and expand beyond the SASB criteria to address areas that the investment team views as most impactful to credit quality. For example, we have added a reputation risk factor to our proprietary ESG scorecard for the U.S. utilities sector to capture geographic and operational risk associated with potential natural disasters, project execution and other idiosyncratic events. Additionally, our proprietary ESG scoring frameworks provide a broad range of relevant ESG factors to rate and benchmark an issuer. We believe our proprietary scoring systems provide a foundation to prioritize and maximize the effectiveness of our ESG engagement efforts.

### Proprietary ESG Ratings Framework

#### ENVIRONMENTAL

<table>
<thead>
<tr>
<th>Factor</th>
<th>SASB</th>
<th>NB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon footprint</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Water impact and remediation</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Toxic emissions and waste</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

#### SOCIAL

<table>
<thead>
<tr>
<th>Factor</th>
<th>SASB</th>
<th>NB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce health and safety</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Engagement with communities, lawmakers and regulators</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Lobbying and government access</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Employee satisfaction</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Reputational risk</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

#### GOVERNANCE

<table>
<thead>
<tr>
<th>Factor</th>
<th>SASB</th>
<th>NB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board independence</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Capability of the board and management</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Management compensation</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Disclosure and transparency of accounting practices</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

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3 Please refer to the end of this document for more information on how the CPA-Zicklin Index is used at Neuberger Berman.
Prioritizing Our Engagement Efforts

Our proprietary ESG scoring systems provide investment teams with the ability to evaluate issuers on credit-relevant ESG factors, both within and across sectors. Establishing a relative assessment of ESG performance is an important part of the engagement process because it allows investment teams to clearly identify outliers and prioritize our engagement with those issuers.

The detailed nature of our proprietary scoring systems provide insight on specific areas of concern and facilitates efficient and precise engagement with issuers supported by data. Additionally, by comparing issuers to sector-leading peers, we believe our investment teams have a framework to establish achievable ESG objectives with issuers that may ultimately lower credit risk and provide positive outcomes for broader stakeholders over the long term. We have historically found that consistent engagement on specific areas of concern is more likely to result in constructive dialogue with issuers, resulting in the highest probability of success.
Issues Engaged upon with Global Corporate Credit Issuers from July 1, 2018 to June 30, 2019

<table>
<thead>
<tr>
<th>Environment</th>
<th>Social</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>23%</td>
<td>28%</td>
<td>49%</td>
</tr>
<tr>
<td>26% Pollution and Mitigation Management</td>
<td>31% Community/Government Relations</td>
<td>33% Long-term Business Strategy</td>
</tr>
<tr>
<td>22% Green Opportunities</td>
<td>17% Labor Relations</td>
<td>24% Disclosure and Financial Controls</td>
</tr>
<tr>
<td>22% Waste/Water Management</td>
<td>11% Cyber Security</td>
<td>23% Risk Management</td>
</tr>
<tr>
<td>12% Climate Change</td>
<td>11% Human Capital Management</td>
<td>7% Board Independence and Quality</td>
</tr>
<tr>
<td>18% Other</td>
<td>10% Health and Safety</td>
<td>4% Compensation Structure</td>
</tr>
<tr>
<td>23%</td>
<td>4% Pricing of Medicines and Health Services</td>
<td>3% Diversity of Board or Management</td>
</tr>
<tr>
<td>15%</td>
<td>3% Access to Healthcare</td>
<td>1% Corruption</td>
</tr>
<tr>
<td>61%</td>
<td>2% Diversity of Workforce</td>
<td>5% Other</td>
</tr>
<tr>
<td>15%</td>
<td>11% Other</td>
<td></td>
</tr>
</tbody>
</table>

1,450 ESG issues engaged upon
984 Engagement meetings
61% of engagements with CFO or CEO
15 total engagements that led to reduced or no exposure to credit

Issues engaged upon with global corporate credit issuers from July 1, 2018 to June 30, 2019.

Source: Neuberger Berman.
Growing Areas of Engagement

While governance, climate change and social impact are longstanding engagement topics, our proprietary scoring and prioritization process also allows us to focus our efforts on growing areas of concern. This proactive approach has identified the following topics that were focal points of our engagement efforts over the last year.

**CYBER SECURITY**
We view cyber security as an important and growing business risk factor across many industries, and have made this a key focus of our engagements. We have identified the following goals when we are engaging with issuers on this topic.

**Goals of our engagement on cyber security:**
- Identify issuers with leading practices in cyber security risk management
- Promote practices that protect consumers and the security of confidential data and information
- Incorporate increased business risk into our thesis for issuers identified as laggards, engage with management regarding desired improvements and track their progress over time

**LABOR RELATIONS**
Labor relations is an important area of focus for our engagement efforts. We view the commitment to provide competitive compensation and benefits as well as professional development and training as critical components of an issuer’s labor management practices. We believe strong labor management policies will mitigate an issuer’s risk of labor shortages, legal liability and reputational risk.

**Goals of our engagement on labor relations:**
- Evaluate an issuer’s labor management policies and identify business models that we believe are subject to high labor intensity, operational risk or potential controversies
- Encourage improvements to labor policies that we believe may mitigate the impact of potentially high employee turnover or other operational risks
- Incorporate increased business risks into our thesis for issuers identified as laggards, engage with management regarding desired improvements and track their labor management practices over time

**FACILITY MANAGEMENT ENVIRONMENTAL POLICIES**
The significant risks associated with proper facility management continue to be a key factor in our ESG issuer assessment, particularly within the mining sector following the recent tailings dam failures. Given the enormous financial, environmental and social costs associated with poor facility management, we have increased our dialogue with issuers to better understand these risks and encourage proactive risk management.

**Goals of our engagement on facility management:**
- Understand the facility management and environmental policies of each issuer in order to identify potential areas of risk
- Encourage best practices to be applied in all geographies irrespective of specific minimum local requirements and regulation
- Encourage investment in technology that can minimize the environmental and social impact of facilities
- Improve disclosure on risks associated with facilities, including third-party assessments and potential environmental and social impacts on an individual facility basis
Reflections from a Fixed Income Perspective

• ESG is an important and evolving credit consideration within global fixed income markets
  - Traditional and emerging ESG risks continue to have a material impact on global fixed income markets

• Global fixed income markets provide a strong platform for engagement
  - With scale in excess of the global equity market, global fixed income markets are a critical source of global capital and can have a material influence on corporate action

• Customized ESG scoring systems provide a foundation for engagement
  - Investment teams can leverage these tools to engage with issuers on targeted topics that they believe have a material impact on credit quality and to prioritize topics where engagement can have the greatest impact

• Strong relationships matter
  - Ongoing engagement is an established aspect of Neuberger Berman’s credit research process. As an important provider of capital and a recognized long-term investor by issuers, we believe NB is a trusted partner that can engage directly with issuers on ESG topics to drive positive outcomes
ENGAGEMENT CASE STUDY
Driving Credit Improvement through Active Engagement

9 ENGAGEMENTS OVER 18 MONTHS (JANUARY 2018 – JUNE 2019)

BACKGROUND
A privately owned utilities issuer pursued aggressive financial policies while only minimally engaging with bondholders. The issuer also lacked disclosure on several key ESG topics such as carbon emissions and employee health and safety, which we view as highly material to its operations as the operator of a large portfolio of power generation assets. These factors prompted us to engage with the issuer about revising its capital allocation strategy and enhancing its social and environmental disclosure, with the ultimate goal of improving the issuer’s credit quality.

OBJECTIVE
Our engagement focused on addressing the company’s capital allocation policy, which we viewed as unsustainable. We believed that by pursuing a more conservative financial strategy, the company would be better positioned to adapt to industry shifts, including taking advantage of low-carbon or renewable energy opportunities. Additionally, by highlighting the importance of ESG risk management to our investment process, we hoped to enhance the company’s disclosure on key topics such as greenhouse gas emissions and workforce relations.

SCOPE AND PROCESS
Our engagement process, which spanned two years, included monthly conversations with the issuer’s management team, physical site visits and discussions with industry competitors, regulators and the firm’s financial sponsor. Our engagement originated as a targeted discussion of the company’s capital allocation policy, but as we developed a relationship with the issuer through frequent communication, we broadened our focus to include social and environmental disclosure opportunities, as well as the long-term potential for the issuer to transition toward lower-carbon forms of power generation.

OUTCOME
Throughout our engagement, the issuer exhibited a clear shift toward increased transparency with investors. The company began attending industry conferences, conducted management roadshows, hosted its first Analyst Day and alleviated many of our initial concerns by articulating a revised financial policy including specific leverage targets. In regard to employee health and safety, the company disclosed its OSHA incident rate, which declined between 2015 and 2018.

The company also reported its historical CO₂, NOX and SO₂ emissions, which notably declined between 2010 and 2018, and communicated an expectation for further emissions declines through 2025, which includes the phasing out of one of the issuer’s coal plants. This is an example of how we identify opportunities with respect to a company’s climate value at risk profile and its ability to address a 2-degree transition in order to push for change while seeking to reduce long-term credit risk.
ENGAGEMENT CASE STUDY

Leveraging Our Relationship to Drive Enhanced Disclosure

4 ENGAGEMENTS OVER 16 MONTHS (FEBRUARY 2018 – MAY 2019)

BACKGROUND
Due to the growth of U.S. energy production over the last decade, we believe the importance of fully disclosing ESG policies and performance standards will be key in assessing the sustainability risks of companies involved in the transport and delivery of oil and gas reserves. This is highlighted as some issuers in the midstream sector have poor track records in relation to safety and community relations. They also face heightened threats from climate change, given their symbiotic relationship with oil and gas producers. The low carbon transition can result in stranded fixed assets and significant financial costs if not properly managed. As a result, we believe that companies in this sector will face increased scrutiny regarding their ESG disclosure levels associated with their operating practices and asset profiles.

We have been a long-term holder of a midstream issuer that has trailed its peers in terms of ESG disclosure. Its lack of publicly disclosed ESG information has resulted in the company being rated poorly by third party assessors such as MSCI. However, our positive view of the company has been driven by its conservative management team, strong operating performance and moderate leverage policy. In addition, from our meetings with management, it was our view that the company has strong internal ESG policies and a track record to support this view, but the lack of disclosure was limiting its ability to be accurately evaluated by the market.

OBJECTIVE
Our intent was to leverage our long-term relationship with the issuer to advocate for more robust disclosure on the company’s ESG policies and performance.

SCOPE AND PROCESS
We had several discussions with senior management regarding ESG topics over the years and expressed our concerns about the company’s lack of disclosure. At the request of the company and in collaboration with our equity research department, we developed a list of material ESG-related subjects that could be used as a guide for future discussions and disclosures. Consistent with SASB industry guidelines, topics of importance included the company’s carbon footprint, community engagement strategy, health and safety performance and approach to managing transition risk.

OUTCOME
Shortly after our engagement, the company informed us that it had updated its website to provide greater public disclosure on ESG topics. Many of the topics addressed on the new website directly answered concerns we voiced in our questions. Additionally, the company has recently published its inaugural Sustainability Report, which further expanded the disclosure on the company’s ESG policies and performance. While we are pleased with the company’s progress, the report stops short of fully aligning with SASB guidelines for the midstream industry. We intend to maintain an ongoing dialogue with the company in order to advocate for further disclosures. Ultimately, we believe performance improvements, and not just disclosure, must be the goal of management, and our engagement efforts will continue to focus on seeing sustainable success in the future.
ENGAGEMENT CASE STUDY

Capturing Credit Improvement through Engagement

14 ENGAGEMENTS OVER 30 MONTHS (NOVEMBER 2016 – MAY 2019)

BACKGROUND
In the metals and mining sector, ESG risk factors exist throughout the value chain; however, these risks can often be overlooked by investors during positive macroeconomic environments. Additionally, there is often lower transparency in emerging markets. As a result, issuer engagement is a key component in Neuberger Berman’s investment process.

In 2016 we identified an investment opportunity in the bonds of a Brazilian integrated steel company; however, our concerns about the company’s environmental and governance risks led us to score the company poorly under our proprietary ESG scoring framework. We were particularly concerned about the environmental licensing of the company’s flagship steel mill and the wet tailings storage at its iron ore mine as poor management of these issues could have short- and long-term financial implications. In addition, we were focused on the controlling shareholder, who had outsized influence on the strategic decision-making at the company and had historically been reluctant to sell assets.

OBJECTIVE
As we evaluated this potential investment opportunity, we leveraged our proprietary ESG scoring assessment to prioritize our engagement efforts on what we believed were the most material issues. As a result, our engagement with the issuer was focused on the following points:

- Will management sufficiently address environmental concerns in the steel segment to ensure continued licensing?
- How is tailings dam risk management evolving in response to changing regulatory risk in the mining sector?
- Will the controlling shareholder remain committed to non-core asset sales and associated deleveraging and liquidity enhancement?

SCOPE AND PROCESS
We engaged with the company for more than two years through in-person and telephonic meetings with the CFO and investor relations representatives, including a meeting at the company’s São Paulo offices. Our initial engagements helped us better understand the nature of the ESG risks and anticipate continued progress on risk mitigation. Our conversations identified the company’s strategy regarding license renewal, which included extensive negotiations with environmental regulators and specific programs targeted at the surrounding community. We also learned more about the company’s tailings management and its investment in alternative processes that was intended to eventually eliminate the need for wet tailings storage. Finally, we closely monitored the company’s asset sale program and bank debt renegotiation process, and gained confidence in the controlling shareholder’s commitment to the process even as transactions were delayed.

OUTCOME
During our extensive engagements, we gained comfort that management was taking appropriate steps to mitigate the identified risks and we increased our proprietary ESG score. This was driven by several factors, including initiatives at the company’s flagship steel mill that have facilitated environmental licensing and management’s commitment to asset sales. We were also encouraged by the company’s plan to move to 100% dry processing of tailings, which will significantly reduce environmental risks at a time when regulatory risk around tailings dams is elevated.

At the same time, we did not believe that the market was correctly valuing the improvement in ESG policies and we invested in the company’s bonds. The company successfully managed its environmental risks and followed through on its commitment to deleverage with asset sales. We remain engaged with management and have encouraged the company to improve its ESG disclosure to better align with industry-leading peers and will track this progress over time.
Conclusion

ESG factors continue to have a material role within global fixed income markets and therefore must be an important component of the credit evaluation process. Consistent with this view, ESG analysis and engagement are conducted at the investment team level with a focus on how ESG factors impact the credit quality of an issuer. We believe our proprietary scoring system allows investment teams to maximize the effectiveness of their engagement by identifying key areas of weakness, providing tangible data to present to issuers during the engagement process and creating a framework to establish issuer objectives that align with industry-leading peers on key ESG topics. We continue to view our proprietary ESG scoring methodologies and strong relationships with management as differentiating elements of our process, which maximize the effectiveness of our engagement and increase the probability of a positive outcome. Moving forward, we plan to leverage our access to management not only to set specific issuer objectives, but also to systematically track an issuer’s progress against these objectives. In situations where we believe it is appropriate, we will align these specific objectives with a Sustainable Development Goal. We believe this next step in our ESG engagement process reinforces our commitment to advancing the principles of socially responsible investing, and we look forward to reporting our progress in future engagement reports.
ESG integration approaches may evolve over time. Please note that for certain products ESG integration is only one input in the credit analysis and is not solely determinative of whether an asset will be purchased.

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The CPA-Zicklin Index benchmarks political disclosure and accountability policies and practices for election-related spending of leading U.S. public companies.

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