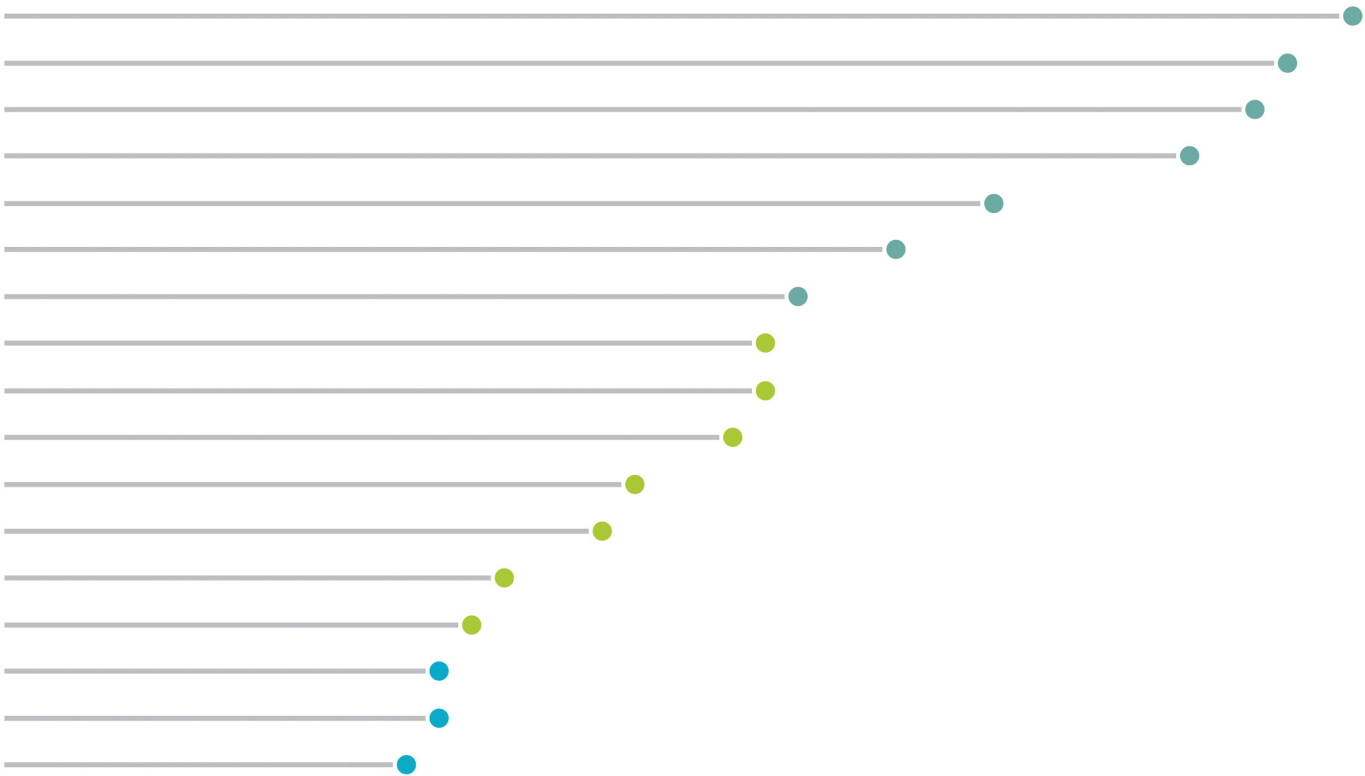


Material Risk Engagement

2025 Q2 Report



Material Risk Engagement promotes and protects long-term value by engaging with high-risk companies on financially-material ESG issues.

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This report summarizes the shareholder engagement activities that Morningstar Sustainalytics performed between April and June 2025. If there is no specific reference to date in graphs and tables, the data is presented as per end of the reporting period. The report has been produced in July 2025 and uses data for the quarter ending 30 June 2025. Version 1 was disseminated on 21 July 2025. Use of and access to this information is limited to clients of Morningstar Sustainalytics and is subject to Morningstar Sustainalytics legal terms and conditions.

Engagement Approach

Morningstar Sustainalytics' Material Risk/Strategy & Risk Engagement engages with high-risk companies on the material ESG issues with the greatest levels of unmanaged risks. The purpose is to protect and develop long-term value in our clients' portfolio companies. Material Risk/Strategy & Risk is an engagement overlay of Sustainalytics' flagship product, ESG Risk Ratings.

The Stewardship team will engage with companies in Morningstar Sustainalytics' Ratings universe, consisting of more than 4,500 investable issuers in developed and emerging markets, which have an ESG Risk Ratings score of 30 or more. The ESG Risk Ratings score reflects the unmanaged ESG risk, so the higher the score, the more risk the company is exposed to.

The engagement is driven by constructive dialogue. The research from the ESG Risk Ratings and the Controversies research are leveraged to encourage companies to cover gaps in Material ESG Issues risk management. Engagement Response, Progress, Positive Developments, and Milestones are consistently tracked to measure commitment and capability to change in addition to the engagement activities conducted. When a company improves by bringing the ESG Risk Ratings score to below 28, the Material Risk/Strategy & Risk Engagement case will be considered resolved.



Executive Summary



Paulina Segreto

Director, Stewardship
Morningstar Sustainalytics

Highlights for the Quarter

In Q2 2025, our engagement efforts continued to deliver measurable impact and advance several active dialogues. We conducted 48 meetings, exchanged 568 emails and calls, tracked 230 positive developments, and recorded 89 key milestones.

We successfully closed eight engagements this quarter, as companies improved their ESG Risk Ratings—crossing the 28-point threshold and entering the Medium Risk category. Several companies were also archived due to universe updates, while 20 new engagements were initiated, expanding our active coverage and reinforcing our commitment to driving ESG improvements across markets.

Strategic Presence in Southeast Asia

ESG reforms continue to gain momentum across Southeast Asia, especially around value chain disclosure, water stress, and regional taxonomy convergence—which are reshaping the investment landscape. This quarter we contributed with direct engagement with stock exchanges, institutional investors, and corporate stakeholders in Malaysia and Singapore.

We co-led a full-capacity investor roundtable at the Southeast Asia Investor Forum and participated in a high-level panel alongside the UNEP Finance Initiative, Zurich Insurance, and Prudential. Discussions focused on regulatory asymmetries, sector blind spots, and the growing demand for stewardship-informed capital. Our Stewardship team provided expert insights on global ESG regulations, value chain risk, and the implementation gap between regulation and corporate readiness.

Governance Focus: Japan's Executive Remuneration Trends

During Japan's 2025 AGM season, we analyzed executive remuneration practices across more than 50 companies listed on the Tokyo Stock Exchange Prime Market. "*Three Key Insights: Analyzing Japan's Executive Remuneration Programmes*" explores evolving governance structures, pay-performance alignment, and disclosure practices. The findings highlight a shift toward greater transparency and shareholder responsiveness in Japan's corporate governance landscape.

Investor Engagement Insight: US Decarbonization Commitments

In first half of 2025, we deepened our long-standing engagements with US issuers, focusing on the credibility of net-zero commitments amid shifting political and regulatory dynamics. In response to recent regulatory rollback trends, we adapted our engagement strategy to include pre-engagement compliance notices and a sharper focus on governance structures that influence transition planning.

Our dialogues emphasized investor expectations around Scope 3 disclosure, capital alignment with low-carbon pathways, and the integration of emissions targets into executive incentives, reinforcing our commitment to support investors in navigating climate-related policy headwinds.

The Energy Demands of AI: A Utility Sector Wake-Up Call

As AI-driven data centers rapidly expand, electricity demand is accelerating at a pace that is beginning to strain the US energy systems. "*AI's Energy Demand Meets US Utility Readiness*" examines how this surge in power needs intersects with persistent gaps in the utility sectors' transition. Using Morningstar Sustainalytics' ESG Risk Ratings and Low Carbon Transition Ratings (LCTR), we assess both current emissions exposure and forward-looking readiness. The research paper outlines investor actions to support scalable, low-carbon infrastructure and promote utility transition strategies through engagement and policy advocacy.

Looking Ahead

With new engagements underway and recent closures completed, we anticipate a busy Q3, including several introductory and content-focused calls with tailored suggested actions for companies to improve their risk management and disclosure practices. We continue to escalate with non-responsive issuers, sending these companies Stewardship Vice President-level and collaborative investor letters, several of which have already prompted responses.

Engagement Overview



312

engagements as of 30 June 2025

20

new engagements



635

companies engaged since March 2020



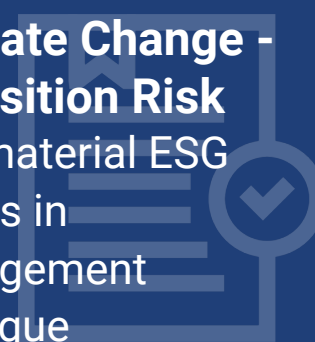
SDG 13 Climate Action

(61%) linked to engagement objective

Asia / Pacific
region with the largest number of engagements

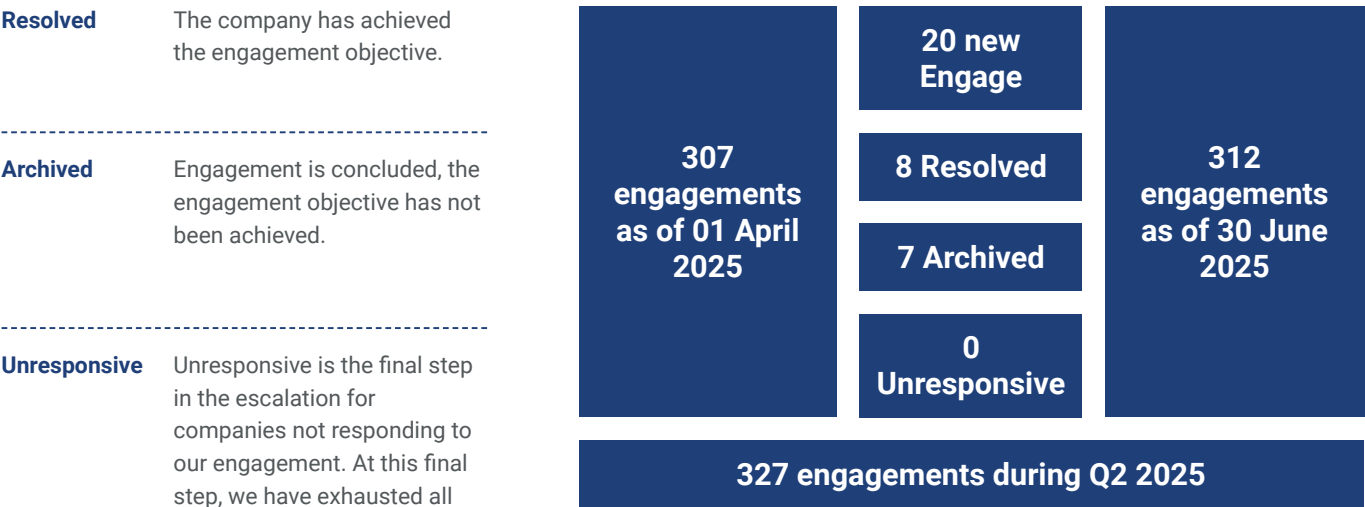
Oil & Gas Producers and Utilities
industries with the most engagements

Disclosure and Climate Change - Transition Risk
top material ESG topics in engagement dialogue



Engagement Status

When we open an engagement, the status is Engage. We will then pursue engagement until we change status to:



307 engagements as of 01 April 2025

20 new Engage

8 Resolved

7 Archived

0 Unresponsive

312 engagements as of 30 June 2025

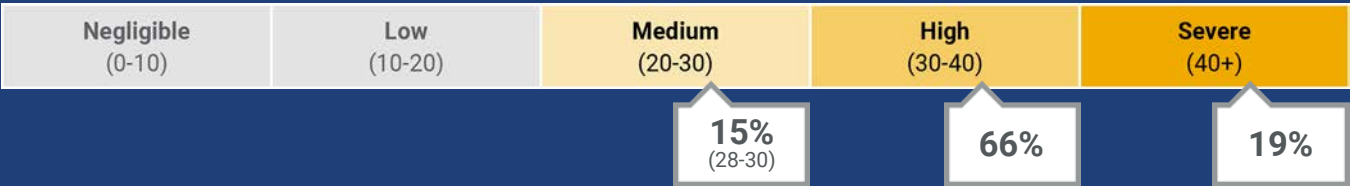
327 engagements during Q2 2025

On a regular basis, universes are rebalanced and issuers might therefore be removed from our data set. Corporate changes can also affect case status. In such circumstances, opening and closing engagement counts will not match. Impacted companies may or may not overlap with investor holdings.

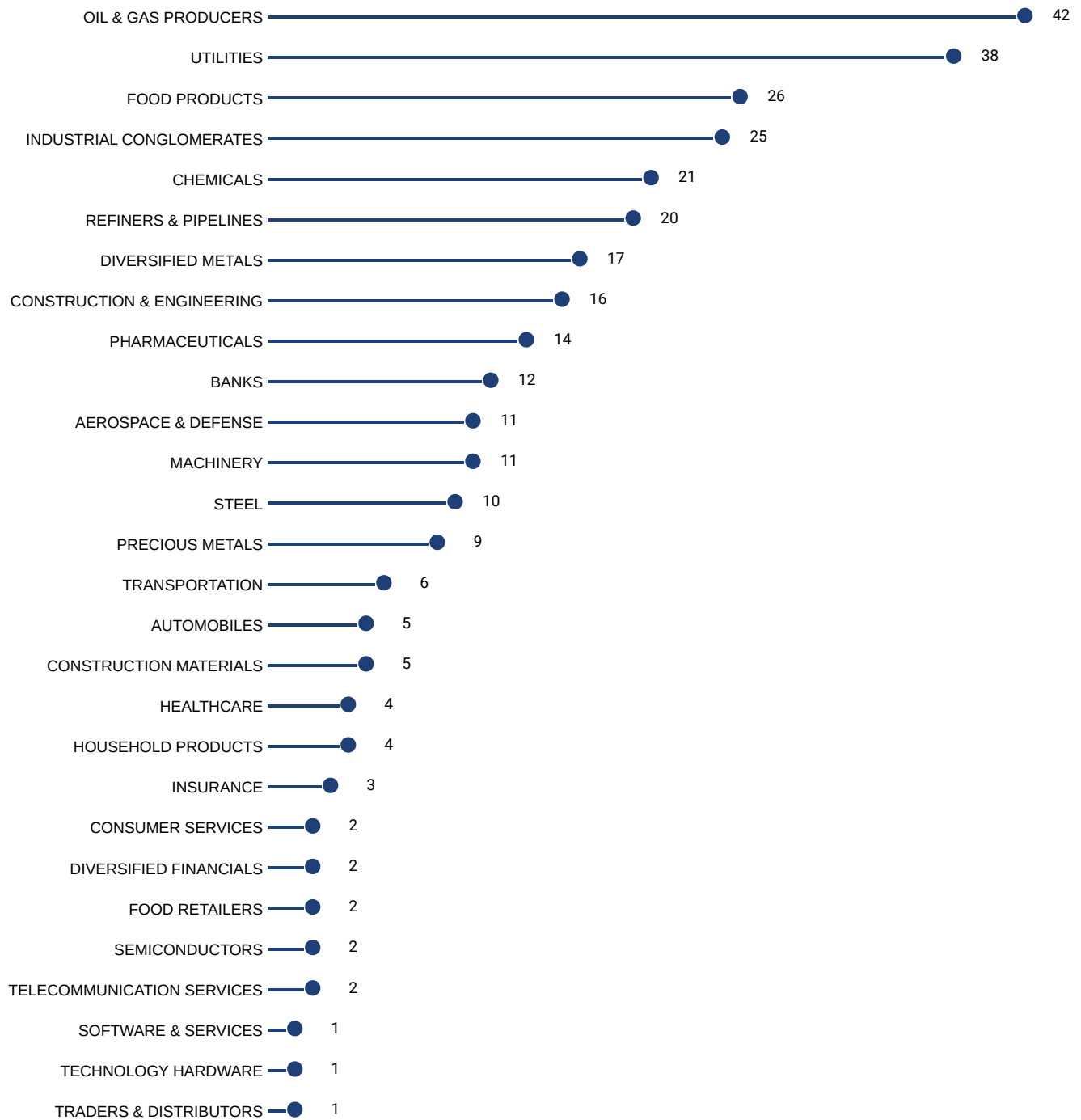
Active Engagements by ESG Risk Ratings Categories



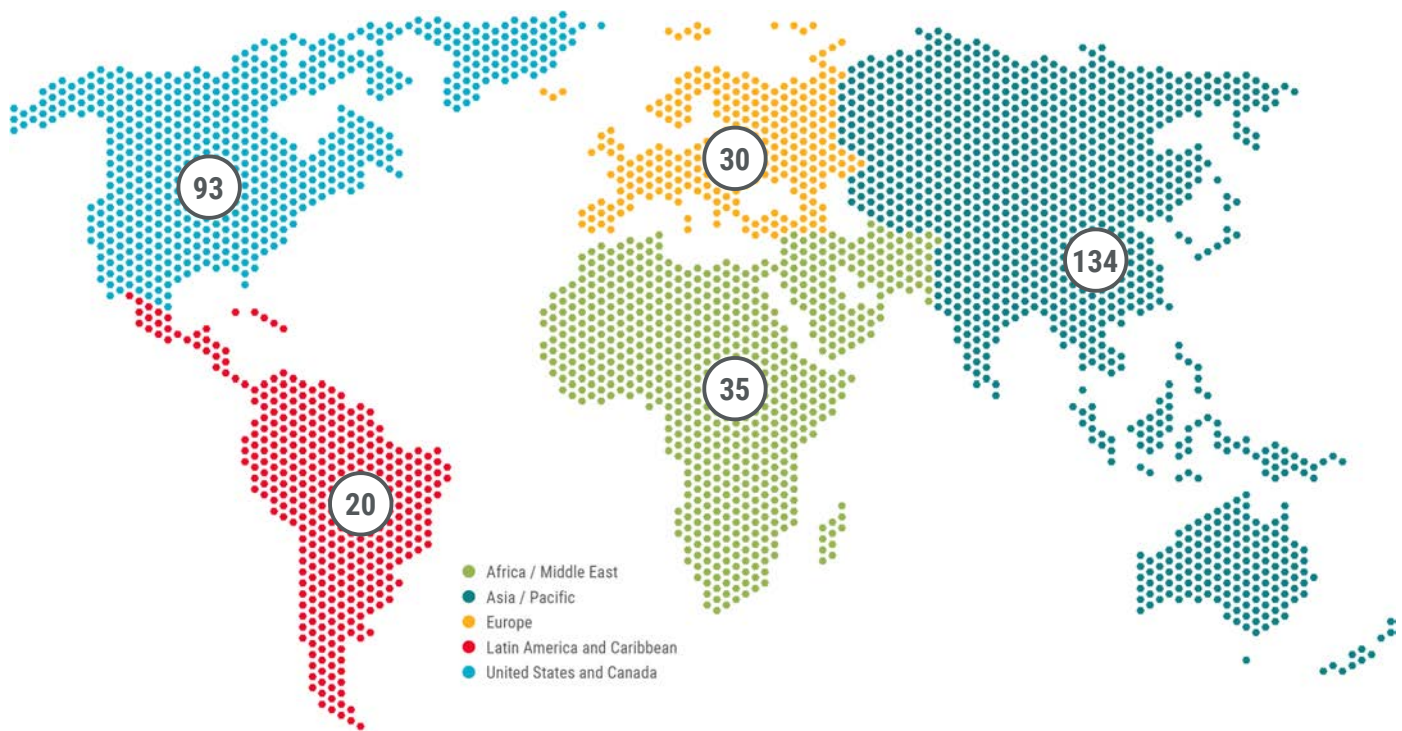
Active Engagements by ESG Risk Ratings Categories



Industry Distribution



Engagements by Headquarter Location

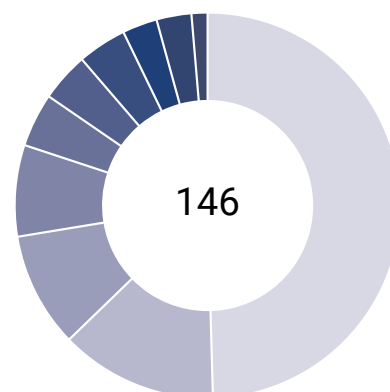


Engagement Topics

During the reporting period, our engagements addressed a number of topics across the environmental, social and governance pillars.

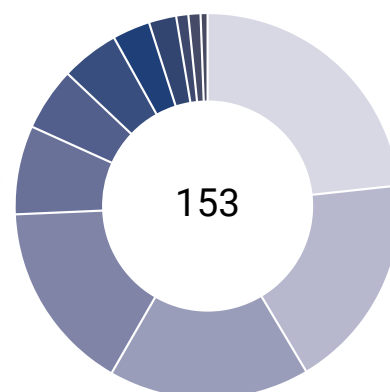
Environmental

- CLIMATE CHANGE - TRANSITION RISK (125)
- WASTE MANAGEMENT (24)
- LAND POLLUTION AND SPILLS (11)
- BIODIVERSITY (10)
- NATURAL RESOURCE USE (7)
- WATER SECURITY (33)
- WATER QUALITY (19)
- AIR POLLUTANT EMISSIONS (10)
- DEFORESTATION (7)
- CIRCULAR ECONOMY (3)



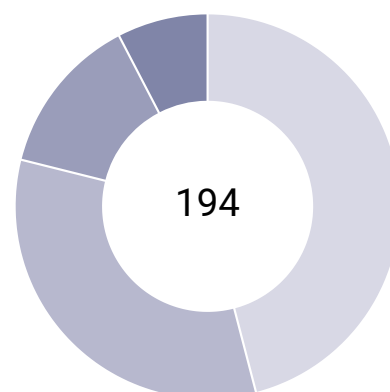
Social

- PRODUCT QUALITY AND SAFETY (54)
- HUMAN CAPITAL (39)
- HUMAN RIGHTS (17)
- DATA PRIVACY AND SECURITY (11)
- MARKETING PRACTICES (5)
- LABOUR RIGHTS (2)
- COMMUNITY RELATIONS (42)
- OCCUPATIONAL HEALTH AND SAFETY (37)
- DIVERSITY, EQUITY AND INCLUSION (DEI) (12)
- INDIGENOUS PEOPLE (7)
- HIGH-RISK TERRITORIES (2)
- JUST TRANSITION (1)



Governance

- DISCLOSURE (141)
- BUSINESS ETHICS, BRIBERY AND CORRUPTION (41)
- ESG GOVERNANCE (101)
- BOARD COMPOSITION (23)



Note: Each engagement case may address multiple ESG topics. The numbers in parentheses indicate how many engagements include that specific topic. The total in the chart reflects the count of engagements with an Environmental, Social, or Governance focus. While a single engagement may span multiple ESG pillars, it is counted only once in the total. However, there is no limit to the number of topics an engagement can cover, so the topic counts will not sum to the total per pillar.

Sustainable Development Goals - Mapping Engagements

All engagements are mapped to the 17 UN Sustainable Development Goals (SDGs). The mapping is done by Morningstar Sustainability and refers to the focus and objective(s) of the engagement.

| | | | |
|---|-----|---|-----|
| 1 No Poverty | 0% | 10 Reduced Inequality | 2% |
| 2 Zero Hunger | 1% | 11 Sustainable Cities and Communities | 22% |
| 3 Good Health and Well-Being | 12% | 12 Responsible Consumption and Production | 48% |
| 4 Quality Education | 0% | 13 Climate Action | 61% |
| 5 Gender Equality | 3% | 14 Life Below Water | 1% |
| 6 Clean Water and Sanitation | 6% | 15 Life on Land | 5% |
| 7 Affordable and Clean Energy | 21% | 16 Peace and Justice, Strong Institutions | 52% |
| 8 Decent Work and Economic Growth | 22% | 17 Partnerships to Achieve the Goal | 3% |
| 9 Industry, Innovation and Infrastructure | 14% | | |

Three Key Insights: Analyzing Japan's Executive Remuneration Programmes



Wakako Mizuta

Manager, Stewardship
Material Risk/Strategy & Risk
Engagement
Morningstar Sustainability

In Japan, it is customary for many companies to hold their annual general shareholders' meetings in June, during which important corporate governance matters—such as the election of directors and decisions on executive remuneration—are addressed. In 2025, Morningstar Sustainability delivered voting recommendations and reviewed the corporate governance structure of over 50 Japanese companies and, among these, companies participating in our Material Risk/Strategy & Risk Engagement service were specifically analyzed to gain deeper insights into their remuneration practices, referencing the recommendations of Japan's Corporate Governance Code, as well as global leading practices.¹ These companies span a wide range of sectors listed on the Tokyo Stock Exchange Prime Market, including automobiles, transportation, utilities, machinery, finance, chemicals, steel, food products, construction & engineering, and conglomerates. Through our analysis activities, we identified three key insights related to engaged companies' governance, structure, and disclosure practices.²

Governance: Remuneration Committees

Under Japan Companies Act, listed companies may adopt one of three corporate governance structures: Companies with a Board of Company Auditors, Companies with an Audit and Supervisory Committee, and Companies with three Committees.³ These structures differ in how oversight functions are organized. The first involves an independent audit body outside of the board of directors, the second integrates the audit function within the board, and the third includes the three internal committees: Nomination, Audit, and Remuneration committees within the board.

As of July 2024, 50.9% of companies listed on the Tokyo Stock Exchange Prime Market have adopted the first structure, 44.2% the second, while only 4.9% adopt the third structure.⁴ Companies with a three Committees governance structure are required to establish a remuneration committee, whereas those with the other two governance structures are not obligated to do so. Consequently, over 90% of companies listed in the Prime Market are not legally obligated to have a remuneration committee of the Board.

Additionally, when it comes to the composition of remuneration committees, Japan's Corporate Governance Code recommends that a majority of committee members be independent outside directors.^{5,6} This approach is similar to that of the United Kingdom but differs from the United States, where listed companies are required to establish remuneration committees composed entirely of independent outside directors.

While analyzing the implementation of remuneration committees and the proportion of independent directors within them, we found that all companies in our analysis, regardless of which of the three corporate governance structures they employed, had established such committees. Notably, these committees, though generally recommended on a voluntary basis, had an average composition of approximately 69% independent outside directors. The analysis also revealed that while 12% of these companies had remuneration committees where independent outside directors did not constitute a majority, 15% were composed entirely of independent outside directors.

In Japan, the Corporate Governance Code is structured on a "comply or explain" basis, requiring companies to provide explanations if they choose not to adopt specific provisions, such as the establishment of committees. Based on our analysis, the results, which demonstrate a high proportion of companies establishing remuneration committees and show that independent outside directors make up more than half of these committees, may suggest that the framework has contributed to meaningful progress in both areas. This represents a positive signal for Japan's remuneration governance; however, concerns regarding the expertise and effectiveness of these committees still leave room for further research.

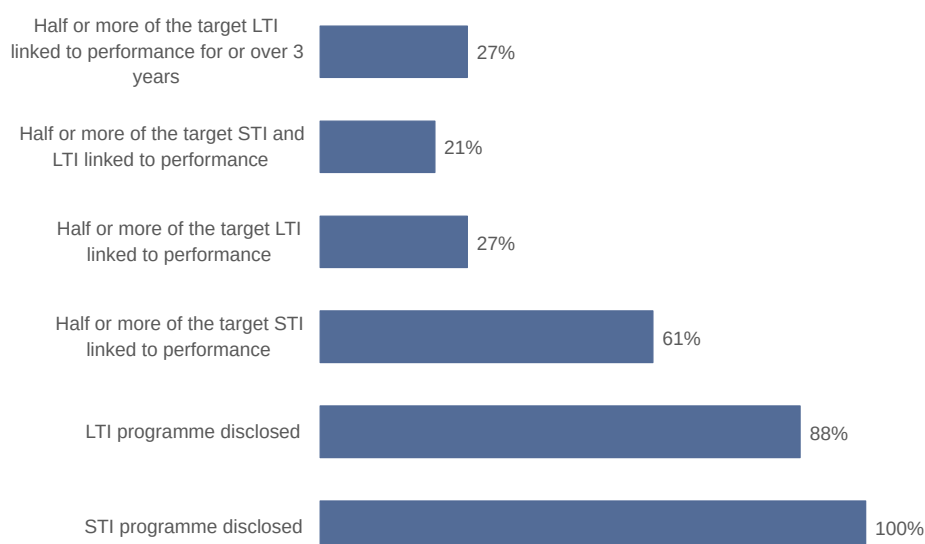
Structure: STI, LTI and Linkages to Performance Metrics

Japanese companies' executive remuneration is generally structured with a balanced combination of three components: fixed remuneration, short-term incentives (STI), such as bonuses, and long-term incentives (LTI), such as stock-based rewards. Among these, both STI and LTI often include performance-linked elements. Performance and equity-based incentives are considered important as they align executive interests with company performance, motivating sustainable growth. However, Japanese companies have traditionally placed a stronger emphasis on fixed remuneration. As a result, the proportion of performance-based pay and equity-linked remuneration tends to be lower in Japan, compared to Western countries.⁷

Throughout our analysis, the adoption status of STI and LTI plans among the covered companies was examined (see Figure 1 below). The results demonstrate that 100% of the companies analyzed have adopted STI plans, while 88% have also implemented LTI plans. When analyzing the degree of performance linkage, approximately 61% of companies with STI plans base half or more of the target award on performance metrics. In contrast, only 27% of companies with LTI plans apply the same level of performance-based design. Furthermore, only about 21% of companies have both STI and LTI plans that are significantly tied to performance outcomes. Regarding the performance measurement period for LTI plans, all Japanese companies analyzed set targets over a period of three years or more. Notably, none of the companies incorporate a performance period of five years or longer.

Japan's Corporate Governance Code emphasizes that executive remuneration should serve as an incentive for sustainable, long-term corporate value creation. This requires aligning remuneration not only with short-term performance but also with long-term results and potential risks. Although the adoption of STI and LTI plans is becoming more widespread, the analysis indicates that the extent of performance linkage particularly in LTI plans remains limited. This suggests that there is still room for improvement in designing more effective incentive structures that support long-term strategic goals.

Figure 1: Implementation of STI and LTI programmes and their linkage to performance.



Source: Morningstar Sustainalytics. For informational purposes only.

Disclosure: Individual Executive Remuneration

Executive remuneration is typically disclosed by category of officer in Japan—such as internal directors, outside directors, internal auditors, or outside auditors. Individual-level disclosure of executive remuneration began with the 2010 amendment to the Cabinet Office Ordinance on Disclosure of Corporate Affairs.⁸ Under this regulation, listed companies are required to disclose the names and remuneration amounts of executives whose annual remuneration exceeds ¥100 million (USD 680,000). Most companies currently comply with this mandatory disclosure requirement. Among the companies covered in our analysis, 67% disclosed individual remuneration amounts in accordance with the legal requirement. In most cases, the disclosure includes not only the total remuneration per individual but also a breakdown by type of remuneration.

However, 21% of the companies did not disclose individual remuneration amounts, citing the absence of any executive whose total consolidated remuneration exceeded ¥100 million. Interestingly, one company voluntarily disclosed the individual remuneration of certain directors, even though it was not legally required. This voluntary disclosure was reportedly implemented as a response to a past incident involving former executives, aiming to enhance transparency and accountability.

Despite this example, voluntary individual disclosure remains rare in Japan. In general, Japanese companies tend to be cautious about proactively disclosing detailed remuneration information. This contrasts with practices in countries such as the United States and the United Kingdom, where disclosure of remuneration for some or all executives is mandatory.

In Japan, unless an executive's remuneration exceeds the ¥100 million threshold, only the total amount and pay-type breakdowns by officer category is disclosed, without any details on the structure of individual remuneration. As a result, it is often difficult to gain a clear understanding of how individual executive remuneration is structured.

In Summary

Since the introduction of Japan's Corporate Governance Code, there have been notable improvements in the systems and disclosure practices related to executive remuneration. These developments have contributed to enhanced governance, as reflected in the information disclosed by companies. However, when compared to Western standards, there remains room for improvement in areas such as the structure of remuneration and the transparency of remuneration amounts. Through its Material Risk/Strategy & Risk Engagement service, Morningstar Sustainalytics will encourage further enhancements in executive remuneration and corporate governance practices in Japan, supporting the development of governance frameworks that contribute to long-term corporate value creation.

Case Study: CITIC Ltd.

Material Risk/Strategy & Risk Engagement - Engagement Since: 30 August 2021



Industry: **Industrial Conglomerates**

Country: **China**

ESG Risk Rating: **50.6**

CITIC Ltd. (CITIC), a Hong Kong-based conglomerate, operates through five main segments: financial services, advanced manufacturing, advanced materials, new consumption, and urbanization.

Progress: **Standard** | Response: **Standard** | Latest Milestone: **3 Engagement Update**

Since engagement began in October 2021, contact with CITIC has been limited but has gradually improved, especially in early 2025. Despite initial challenges, two conference calls were held, with a reconnection call in May 2025 to discuss key ESG risks and recent developments. CITIC has since demonstrated notable progress in governance, ethics, and carbon management.

Focus Area

The most recent discussion in May 2025 focused on CITIC's ESG risk management practices, particularly in corporate and product governance, carbon emissions management, and business ethics. Future engagement will focus on enhancing carbon management and ESG integration into financial operations. Emphasis will also be placed on emissions reporting (quantitatively) and third-party verification to improve transparency and credibility.

Engagement Outcomes

CITIC demonstrates a clear and structured approach to ESG governance, encompassing oversight of ESG strategy, regulatory compliance, risk management, and auditing. Its disclosures are generally transparent and comprehensive, although reporting on Scope 3 emissions remains a challenge.

Regarding ESG integration into financials, CITIC's financial arm, CITIC Bank, has established a framework for assessing the ESG impact of its financing activities. While it continues to provide funding to highly energy-intensive sectors and projects, the bank aims to support their transition toward a low-carbon economy. This includes facilitating energy efficiency upgrades, technological improvements, and the restructuring of energy systems.

Insights & Outlook

CITIC has set clear targets to reduce Scope 1 and 2 GHG emissions, while Scope 3 remains challenging due to its complex, global structure and numerous subsidiaries. To address this, carbon assessments of suppliers began with selected subsidiaries in 2024. CITIC outlined comprehensive risk control measures across key risks areas and expressed openness to external guidance for further enhancing transparency and improving practices. CITIC has made notable progress in reducing its carbon intensity. However, further efforts are needed, as its current intensity remains above the industry average.

Engagement Results



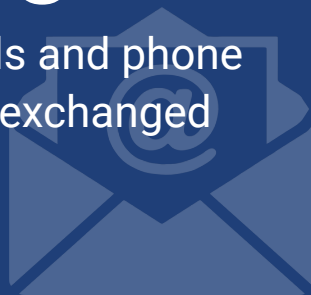
48

meetings



568

emails and phone
calls exchanged



8

engagements
Resolved



89

Milestones achieved

230

Positive Developments



49%

of engagements with
Excellent or Good
Response

47%

of engagements
with Standard
Progress

Engagement Progress

Progress reflects the pace and scope of changes towards the engagement objective that the company is making, assessed on a five-point scale.

| | | | | |
|------------------|--|--|------------------|-----------|
| Excellent | The company has adopted a proactive approach and addressed the issues related to the change objective. | | 5% (14) | Excellent |
| Good | The company has taken sufficient measures to address the issues related to the change objective. | | 31% (86) | Good |
| Standard | The company has undertaken a number of measures to address the issues related to the change objective. | | 47% (131) | Standard |
| Poor | The company has indicated willingness to addressing the issues related to the change objective, but no measures have been taken yet. | | 12% (33) | Poor |
| None | The company has not made any progress against the engagement objective. | | 6% (17) | None |

Engagement Response

Response reflects the company's willingness to engagement dialogue with investors, assessed on a five-point scale.

| | | | | |
|------------------|---|--|------------------|-----------|
| Excellent | The company is proactive in communicating around the issues related to the change objective. | | 11% (30) | Excellent |
| Good | The company addresses all the issues related to the change objective. | | 38% (107) | Good |
| Standard | The company provides responses to some of the issues related to the change objective. | | 19% (54) | Standard |
| Poor | The company has initially responded but not properly addressed the issues related to the change objective and is unwilling to engage further with us. | | 15% (41) | Poor |
| None | The company has not responded to the inquiries. | | 17% (49) | None |

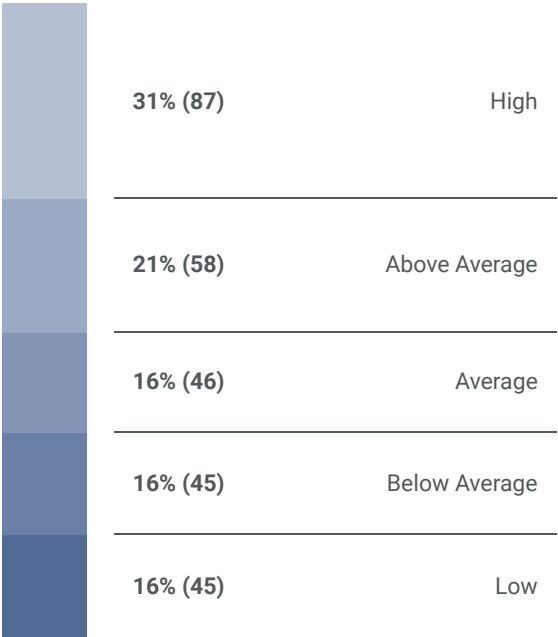
Engagement Performance

Performance describes the combined company Progress and Response.

Engagement Performance Assessment Update

We have five tiers to offer a nuanced understanding, the tiers are: Low, Below Average, Average, Above Average, and High.

The Progress and Response matrix below is used to determine performance.



Progress and Response Matrix

| | | RESPONSE | | | | |
|----------|-----------|---------------|---------------|---------------|---------------|---------------|
| | | EXCELLENT | GOOD | STANDARD | POOR | NONE |
| PROGRESS | EXCELLENT | High | High | Above Average | Average | Average |
| | GOOD | High | High | Above Average | Average | Average |
| | STANDARD | Above Average | Above Average | Average | Below Average | Below Average |
| | POOR | Average | Average | Below Average | Low | Low |
| | NONE | Average | Average | Below Average | Low | Low |

Engagement Milestones

Milestones are our five-stage tracking system used in achieving the engagement objective.

89 Milestones
achieved in Q2 2025

Milestones Framework

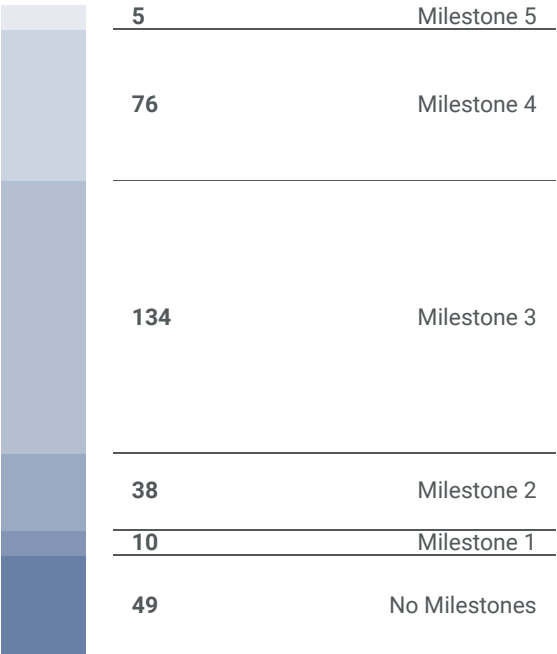
| | |
|-------------|---|
| Resolved | Case successfully closed. |
| Milestone 5 | Change objective is considered fulfilled. |
| Milestone 4 | Implementation of strategy has advanced meaningfully, and related issuer disclosure maturing. |
| Milestone 3 | Strategy is well formed and has moved into early stages of implementation. |
| Milestone 2 | Issuer establishes a strategy to address the issue. |
| Milestone 1 | Acknowledge of issue(s) and commitment to mitigation. |

YTD Highest Milestone Achieved (Resolved)



Note: Cumulative year to date resolved cases.

Highest Milestone Achieved (Engage)



Note: Milestone distribution of ongoing Engage cases at the end of the reporting period.



Engagements Resolved

| COMPANY | COUNTRY | INDUSTRY | ISSUE | QUARTER |
|---------------------------------|--------------------------|--------------------|---|---------|
| Alinma Bank | Saudi Arabia | Banks | Focus on Risk Assessment and ESG Disclosure | Q2 |
| Asian Paints Ltd. | India | Chemicals | Focus on Emissions, Effluents and Waste and Resource Use | Q2 |
| Donaldson Co., Inc. | United States of America | Machinery | Focus on Product Governance | Q2 |
| Dubai Islamic Bank PJSC | United Arab Emirates | Banks | Focus on Product Governance | Q2 |
| Freeport-McMoRan, Inc. | United States of America | Diversified Metals | Focus on Emissions, Effluents and Waste and Community Relations | Q2 |
| Saudi Awwal Bank | Saudi Arabia | Banks | Focus on Product Governance | Q2 |
| United States Steel Corp. | United States of America | Steel | Focus on Risk Assessment and ESG Disclosure | Q2 |
| Universal Health Services, Inc. | United States of America | Healthcare | Focus on Risk Assessment and ESG Disclosure | Q2 |

Resolved - Alinma Bank

ESG Risk Ratings Score

| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|
|----------------------|----------------|-------------------|-----------------|-----------------|

24.1



INDUSTRY:
Banks

COUNTRY:
Saudi Arabia

ENGAGEMENT FOCUS:
ESG Governance and Financials—Integration
Human Capital
Data Privacy

RATIONALE FOR RESOLVED STATUS:

Alinma Bank has improved its ESG Risk Rating score to 24.1.

Positive Development Highlights:

- Alinma Bank strengthened its Sustainability Policy by introducing an ESG governance structure, appointing 15 champions across six key areas under Board oversight.
- A 2024 data privacy policy is in place, overseen by a Data Governance Officer, with annual cybersecurity assessments across departments.
- The company cut Scope 1 and 2 emissions by 28.2%, achieving the 2025 target two years ahead of schedule through the expansion of on-site solar installations and deployment of Energy Management Systems (EMS) at 24 branches.
- The green asset portfolio increased from SAR 96 million to SAR 362 million (approx. USD 96.5 million) in 2023, reflecting strong growth in ESG-aligned financial activities.

In the latest update of the ESG Risk Rating, Alinma Bank has improved its Risk Rating score by 7.8 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Asian Paints Ltd.

ESG Risk Ratings Score

| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|
|----------------------|----------------|-------------------|-----------------|-----------------|

21.5



INDUSTRY:
Chemicals

COUNTRY:
India

ENGAGEMENT FOCUS:
Corporate Governance
Emissions, Effluents and Waste
Resource Use

RATIONALE FOR RESOLVED STATUS:
Asian Paints Ltd. has improved its ESG Risk Rating score to 21.5.

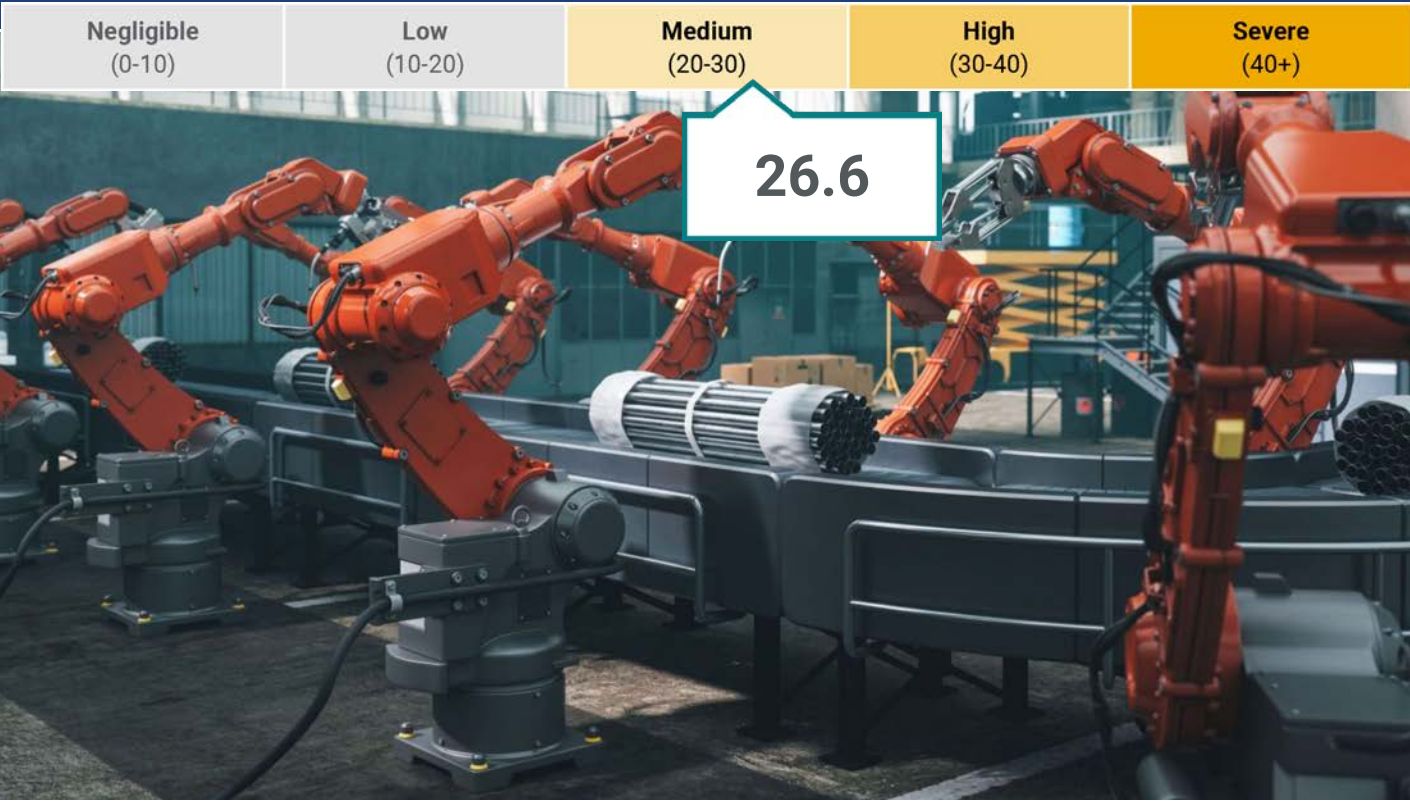
Positive Development Highlights:

- Asian Paints’ ESG improvements are structural and sustained, with board-level oversight, annual KPI tracking, and ESG targets embedded in executive performance. Long-term emissions goals to 2030 are tracked against a 2013 baseline.
- Water use per kiloliter of paint dropped by 54%, effluents fell 25%, and 38.7% of freshwater is now replenished annually. Across operations, the company recycles 55% of total water use.
- Eight major manufacturing sites have achieved near-water neutrality by recycling 96% of process water through advanced ETP systems and rainwater harvesting.
- Scope 1 and 2 GHG emissions intensity has fallen 75% since 2013, with the 2030 goal of 80% reduction on track, driven by efficiency upgrades and low-carbon processes.
- Renewable electricity now powers 65.8% of operations—up from 0.1% in 2013—through biomass energy use and solar installations, especially in Gujarat and Andhra Pradesh regions. A 100% target is set for 2030.

In the latest update of the ESG Risk Rating, Asian Paints has improved its Risk Rating score by 9.1 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Donaldson Co., Ltd.

ESG Risk Ratings Score



INDUSTRY:
Machinery

COUNTRY:
United States

ENGAGEMENT FOCUS:
Product Governance
E&S Impact of Products and Services
Occupational Health and Safety

RATIONALE FOR RESOLVED STATUS:
Donaldson Co., Inc. has improved its ESG Risk Ratings score to 26.6.

Positive Development Highlights:

- Donaldson enhanced its whistleblower programme by expanding accessibility through a multilingual global hotline and launching a centralized disclosure management tool. The Vice President of Global Compliance provides regular updates to the Audit Committee.
- The company completed 134 energy efficiency projects in 2024, resulting in 14,961 MWh of energy savings and a reduction of 4,219 metric tons of CO2e, including upgrades to HVAC, compressed air, and water systems.
- The company has taken clear steps toward a sustainable product strategy by applying eco-design principles in its fuel cell product family and introducing modular, recyclable components.
- Donaldson has strengthened its safety practices with ISO 45001 certification at 14 sites, a comprehensive environmental, health and safety framework, and a new dashboard to track performance.

In the latest update of the ESG Risk Rating, Donaldson Co. Inc has improved its Risk Rating score by 2.7 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Dubai Islamic Bank PJSC

ESG Risk Ratings Score

| | | | | |
|----------------------|----------------|-------------------|-----------------|-----------------|
| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|

25.0



INDUSTRY:
Banks

COUNTRY:
United Arab Emirates

ENGAGEMENT FOCUS:
Product Governance
Business Ethics
ESG Integrations

RATIONALE FOR RESOLVED STATUS:
Dubai Islamic Bank PJSC has improved its ESG Risk Rating score to 25.0.

Positive Development Highlights:

- Dubai Islamic Bank has embedded ESG into decision-making and risk analysis by integrating sustainability across operations. A Board-level committee oversees ESG, supported by sustainability champions and dedicated risk integration within credit operations.
- The company’s ESG scorecard and materiality assessment now guide its disclosure priorities and help align sustainability focus areas with operational performance.
- Dubai Islamic Bank began reporting on GRI metrics in 2023, enabling more consistent tracking of ESG progress, performance gaps, and disclosure trends over time.
- In 2024, Dubai Islamic Bank issued its third Sustainable Linked Bond (USD 2.75B) targeting renewable energy, carbon capture, and social programmes — reinforcing ESG commitments at the product level.

In the latest update of the ESG Risk Rating, Dubai Islamic Bank PJSC has improved its Risk Rating score by 9.2 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Freeport McMoran, Inc.

ESG Risk Ratings Score

| | | | | |
|----------------------|----------------|-------------------|-----------------|-----------------|
| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|

26.2

INDUSTRY:
Diversified Metals Mining

COUNTRY:
United States

ENGAGEMENT FOCUS:
Materiality and ESG Governance
Community Relations
Emissions, Effluents and Waste
Carbon—Own Operations

RATIONALE FOR RESOLVED STATUS:
Freeport McMoran, Inc. has improved its ESG Risk Rating score to 26.2.

Positive Development Highlights:

- Freeport McMoran discloses that in 2024 the company conducted an externally led sustainability materiality assessment to incorporate impact materiality as described by the Global Reporting Initiatives (GRI) Standards.
- The company disclosed a standalone PT-FI Sustainability Report for its Grasberg Mine operations in Indonesia in December of 2024. The report includes updated economic and social contribution data and information.
- In its 2024 Annual Report on Sustainability, Freeport McMoran discloses a 2025 target to develop internal water stewardship plans for seven mining and mineral processing operations with medium-high, high or extremely highwater stress ratings.
- The company has increased use of renewable energy at its sites. In 2024, 44% of electricity purchased for American Copper came from renewables. El Abra mine used 100% certified renewable energy in 2023 and 2024 through its existing power purchase agreement (PPA). In 2024, nearly 75% of Cerro Verde’s electricity was renewable.

In the latest update of the ESG Risk Rating, Freeport McMoran has improved its Risk Rating management score by 5.8 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Saudi Awwal Bank

ESG Risk Ratings Score

| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|
|----------------------|----------------|-------------------|-----------------|-----------------|

22.8



INDUSTRY:
Banks

COUNTRY:
Saudi Arabia

ENGAGEMENT FOCUS:
Corporate Governance
Product Governance
Business Ethics

RATIONALE FOR RESOLVED STATUS:

Saudi Awwal Bank has improved its ESG Risk Ratings score to 22.8.

Positive Development Highlights:

- Saudi Awwal Bank (SAB) strengthened ESG oversight by establishing a board-level ESG committee and implementing a structured sustainability strategy with defined pillars, KPIs, and governance processes.
- In 2023, the bank refreshed its Ethical Conduct Framework, introducing mandatory anti-bribery training, whistleblower protections, and ethics compliance measures—now overseen by the Risk & Compliance Committee.
- A digitized SME lending platform disbursed SAR2 billion (around USD 540 million) in green and climate-aligned loans by Q1 2025, while a sustainable procurement policy now covers 80% of supplier spend with embedded ESG and labour standards.
- SAB disclosed its financed emissions baseline under the Partnership for Carbon Accounting Financials methodology in 2025, becoming the first Saudi bank to do so and demonstrating leadership in climate risk transparency.

In the latest update of the ESG Risk Rating, Saudi Awwal Bank has improved its Risk Rating score by 13.5 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - United States Steel Corp.

ESG Risk Ratings Score



INDUSTRY:
Steel

COUNTRY:
United States

ENGAGEMENT FOCUS:
Risk Assessment and ESG Disclosure
Occupational Health and Safety
Carbon—Own Operations

RATIONALE FOR RESOLVED STATUS:
United States Steel Corp. has improved its ESG Risk Rating score to 26.7.

Positive Development Highlights:

- United States Steel Corp. has achieved a record-low Days Away from Work rate of 0.04 in 2023, significantly outperforming industry benchmarks. Additionally, 90% of its operating facilities are now certified under ISO 45001, reflecting a mature and effective safety management system.
- The company has implemented the EcoVadis platform to assess ESG risks across 75% of its supplier spend. The company is using this data to drive continuous improvement and has also published a Supplier Code of Conduct and Sustainable Procurement Policy to ensure alignment with its ESG standards.
- United States Steel Corp. has expanded its portfolio of low-carbon steel products, including verdeX® and InduX™, which are produced with up to 90% recycled content and significantly lower emissions. These products support customer decarbonization goals and reinforce the company’s role in the green economy.

In the latest update of the ESG Risk Rating, United States Steel Corp. has improved its Risk Rating score by 6.6 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Resolved - Universal Health Services, Inc.

ESG Risk Ratings Score

| Negligible (0-10) | Low (10-20) | Medium (20-30) | High (30-40) | Severe (40+) |
|----------------------|----------------|-------------------|-----------------|-----------------|
|----------------------|----------------|-------------------|-----------------|-----------------|

26.7

INDUSTRY:
Healthcare

COUNTRY:
United States

ENGAGEMENT FOCUS:
Business Ethics
Data Privacy and Cybersecurity
Emissions Effluents and Waste

RATIONALE FOR RESOLVED STATUS:
Universal Health Services, Inc. has improved its ESG Risk Rating score 26.7.

Positive Development Highlights:

- Universal Health Services has reinforced its commitment to ethical conduct by confirming that all employees receive mandatory training on the Code of Conduct, anti-corruption practices, and compliance reporting protocols both at hire and annually. These are supported by post-training evaluations to confirm understanding and by prominently displayed reporting tools at facilities.
- The company has enhanced its emergency preparedness disclosures by outlining that all facilities conduct annual training exercises and community emergency drills, supported by tailored hazard and vulnerability assessments. In 2023, the Environmental Risk and Emergency Management Team completed targeted training modules for leadership and conducted over 70 virtual and 47 on-site facility visits to strengthen organizational readiness.
- Universal Health Services has strengthened its cybersecurity programme by implementing regular internal and external vulnerability assessments, conducting bi-monthly phishing simulations, and maintaining close oversight through its Board Audit Committee.

In the latest update of the ESG Risk Rating, Universal Health Services Inc. has improved its Risk Rating score by 4.1 points, bringing it into the medium risk category and below the 28-point threshold for engagement.

Low Performance Engagements

The following list displays Low Performance companies with Poor or None Progress in combination with Poor or None Response.

When a case is added to the Low Performance list, a 24-month process of specific engagement using a wide range of engagement tools e.g. collaborative investors letters or letters to the company's board, will take place. After two years, the case will be reviewed and a Disengage status can be selected to reflect all other engagement options have been ineffective.

For each Low Performance case, there is a **Low Performance Time Tracker** which illustrates the time elapsed.

| COMPANY | COUNTRY | ISSUE | PROGRESS | RESPONSE | TIME TRACKER |
|---------------------------------|--------------------------|--|--|--|--|
| One piece equals three months. | | | | | |
| ARC Resources Ltd. | Canada | Focus on Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 0-3 |
| Blue Owl Capital, Inc. | United States of America | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 0-3 |
| Encompass Health Corp. | United States of America | Focus on Product Governance and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 0-3 |
| Hess Corp. | United States of America | Focus on Carbon Products and Services | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 0-3 |
| Athabasca Oil Corp. | Canada | Focus on Carbon and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| Baytex Energy Corp. | Canada | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| HF Sinclair Corp. | United States of America | Focus on Carbon and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| ORION Corp. | South Korea | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| QL Resources Bhd. | Malaysia | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| Wanhua Chemical Group Co., Ltd. | China | Focus on ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |

| COMPANY | COUNTRY | ISSUE | PROGRESS | RESPONSE | TIME TRACKER |
|---|--------------------------|---|--|--|--|
| One piece equals three months. | | | | | |
| Yunnan Baiyao Group Co., Ltd. | China | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| Zhangzhou Pientzhuang Pharmaceutical Co., Ltd. | China | Focus on Risk Assessment and Corporate Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 3-6 |
| China State Construction Engineering Corp. Ltd. | China | Focus on Risk Assessment | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| DTE Energy Co. | United States of America | Focus on Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| EOG Resources, Inc. | United States of America | Focus on Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| General Dynamics Corp. | United States of America | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| Kintetsu Group Holdings Co., Ltd. | Japan | New Case - Focus to be Determined | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| MasTec, Inc. | United States of America | Focus on Carbon and Community Relations | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| Saudi Industrial Investment Group | Saudi Arabia | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| Saudi Kayan Petrochemical Co. | Saudi Arabia | Focus on Emissions, Effluents and Waste and Community Relations | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |
| Whitecap Resources, Inc. | Canada | Focus on Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 6-9 |

| COMPANY | COUNTRY | ISSUE | PROGRESS | RESPONSE | TIME TRACKER |
|--|--------------------------|--|--|--|---|
| One piece equals three months. | | | | | |
| Bausch Health Cos., Inc. | Canada | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 9-12 |
| Targa Resources Corp. | United States of America | Focus on Emissions, Effluents and Waste and Community Relations | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 9-12 |
| Suncor Energy, Inc. | Canada | Focus on Carbon and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 12-15 |
| China Petroleum & Chemical Corp. | China | Focus on Carbon and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> 15-18 |
| Bank of China Ltd. | China | Focus on ESG Integration Financials | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Bank of Shanghai Co., Ltd. | China | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Coal India Ltd. | India | Focus on Occupational Health and Safety and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Eregli Demir ve Çelik Fabrikalari TAS | Turkey | Focus on Carbon Own Operations | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Exxon Mobil Corp. | United States of America | Focus on Carbon and Emissions, Effluents and Waste | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Foshan Haitian Flavouring & Food Co., Ltd. | China | Focus on ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Grupo Carso SAB de CV | Mexico | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Grupo Financiero Inbursa SAB de CV | Mexico | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |

| COMPANY | COUNTRY | ISSUE | PROGRESS | RESPONSE | TIME TRACKER |
|---|--------------------------|---|--|--|---|
| One piece equals three months. | | | | | |
| GS Holdings Corp. | South Korea | Focus on Carbon Own Operations | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Guangdong Haid Group Co., Ltd. | China | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| HEICO Corp. | United States of America | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Hindustan Petroleum Corp. Ltd. | India | Focus on Carbon and Community Relations | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Industrial & Commercial Bank of China Ltd. | China | Focus on ESG Integration Financials | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| KOSÉ Corp. | Japan | Focus on Corporate Governance | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Masimo Corp. | United States of America | Focus on Risk Assessment and ESG Disclosure | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| National Industrialization Co. | Saudi Arabia | Focus on Emissions, Effluents and Waste and Land Use and Biodiversity | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Shanghai Fosun Pharmaceutical (Group) Co., Ltd. | China | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Shanghai Pudong Development Bank Co., Ltd. | China | Focus on ESG Integration Financials | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Toyo Suisan Kaisha, Ltd. | Japan | Focus on Corporate Governance | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |
| Zensho Holdings Co., Ltd. | Japan | Focus on Product Governance | <div><div></div><div></div><div></div><div></div><div></div></div> None | <div><div></div><div></div><div></div><div></div><div></div></div> Poor | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> Above 24 |

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Engagement Status Updates

The following is an overview of all engagement status updates from 1 April to 30 June 2025.

New Engage

| COMPANY | COUNTRY | ISSUE | QUARTER |
|---|--------------------------|-----------------------------------|---------|
| Advantage Energy Ltd. | Canada | New Case - Focus to be Determined | Q2 |
| Al Rajhi Co. for Cooperative Insurance | Saudi Arabia | New Case - Focus to be Determined | Q2 |
| China Eastern Airlines Corp. Ltd. | China | New Case - Focus to be Determined | Q2 |
| China Resources Pharmaceutical Group Ltd. | Hong Kong | New Case - Focus to be Determined | Q2 |
| Daqin Railway Co., Ltd. | China | New Case - Focus to be Determined | Q2 |
| Dominion Energy, Inc. | United States of America | New Case - Focus to be Determined | Q2 |
| Frontline Plc | Cyprus | New Case - Focus to be Determined | Q2 |
| Hainan Airlines Holding Co., Ltd. | China | New Case - Focus to be Determined | Q2 |
| International Petroleum Corp. | Canada | New Case - Focus to be Determined | Q2 |
| Mitsui & Co., Ltd. | Japan | New Case - Focus to be Determined | Q2 |
| Mouwasat Medical Services Co. | Saudi Arabia | New Case - Focus to be Determined | Q2 |
| New Fortress Energy, Inc. | United States of America | New Case - Focus to be Determined | Q2 |
| PT Amman Mineral Internasional Tbk | Indonesia | New Case - Focus to be Determined | Q2 |
| RBC Bearings, Inc. | United States of America | New Case - Focus to be Determined | Q2 |

| COMPANY | COUNTRY | ISSUE | QUARTER |
|---------------------------|---------|-----------------------------------|---------|
| Shimizu Corp. | China | New Case - Focus to be Determined | Q2 |
| Spring Airlines Co., Ltd. | China | New Case - Focus to be Determined | Q2 |
| Storskogen Group AB | Sweden | New Case - Focus to be Determined | Q2 |
| Superior Plus Corp. | Canada | New Case - Focus to be Determined | Q2 |
| TAISEI Corp. | Japan | New Case - Focus to be Determined | Q2 |
| Tourmaline Oil Corp. | Canada | Focus on ESG Disclosure | Q2 |

New Archived

| COMPANY | COUNTRY | ISSUE | PREVIOUS STATUS | QUARTER |
|----------------------------|--------------------------|--|-----------------|---------|
| Arcadium Lithium Plc | Ireland | Focus on Occupational Health and Safety and Emissions, Effluents and Waste | Engage | Q2 |
| Filo Corp. | Canada | Focus on ESG Disclosure | Engage | Q2 |
| Kweichow Moutai Co., Ltd. | China | Focus on Corporate Governance | Engage | Q2 |
| Lupin Ltd. | India | Focus on Risk Assessment and ESG Disclosure | Engage | Q2 |
| Marathon Oil Corp. | United States of America | Focus on Carbon and Emissions, Effluents and Waste | Engage | Q2 |
| Microchip Technology, Inc. | United States of America | Focus on Product Governance | Engage | Q2 |
| Regis Resources Ltd. | Australia | Focus on Risk Assessment and ESG Disclosure | Engage | Q2 |

AI's Energy Demand Meets US Utility Readiness: A Look at Carbon Intensity and Transition Risk



Othman Trid

Manager, Stewardship
Material Risk/Strategy & Risk
Engagement
Morningstar Sustainability



Shane Tiley

Associate Director, Stewardship
Material Risk/Strategy & Risk
Engagement
Morningstar Sustainability

Artificial intelligence (AI) is revolutionizing various sectors, driving significant advancements and efficiencies. However, the exponential growth in AI and the resulting data center energy demand poses substantial challenges for the power and utilities sectors. This article explores the implications of AI's rising energy needs and the associated opportunities and challenges in the US power market, with a focus on clean and reliable energy solutions.

Global AI and Data Center Demand Trends

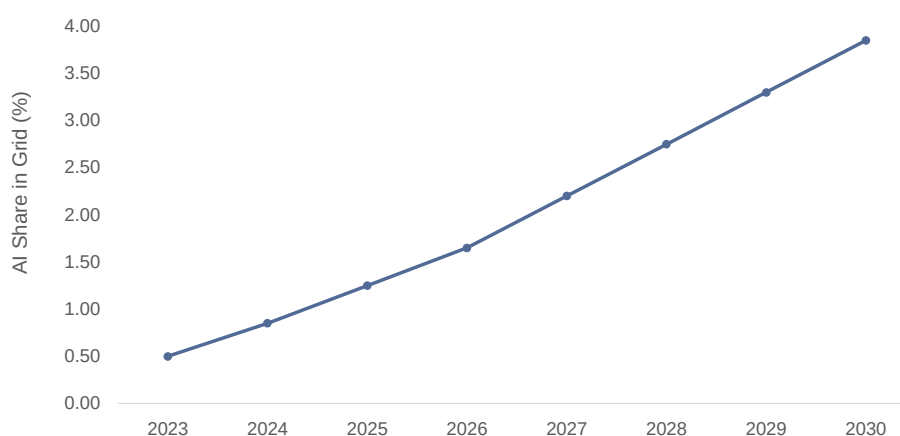
Projections indicate that data center energy demand is entering a new growth phase, fueled by digitalization and technological advances, particularly AI.⁹ Computational power needs for AI are doubling roughly every 100 days, with associated energy use growing at 26–35% annually.¹⁰ Global data demand is expected to nearly triple from 2022 to 2027.¹¹ While energy efficiency has improved globally, the rising energy burden of digital infrastructure is emerging as a serious challenge.

According to the International Energy Agency's (IEA) 2024 World Energy Outlook, over 11,000 data centers are now in development globally—and their spatial concentration can have major local impacts on electricity markets.¹² Although data center electricity demand will rise, it is projected to remain a relatively small portion of global electricity growth to 2030.¹³ However, its impact will be more pronounced at regional levels, particularly in large data center hubs like the US.

Opportunities and Challenges in the US Power Market

The training of large language models, including the GPT series, is significantly increasing electricity consumption across US-based AI infrastructure providers.¹⁴ Power usage effectiveness (PUE) has steadily improved across the US data center industry, with operators now reporting PUEs well below the industry average from a decade ago.¹⁵ However, the growing share of total US electricity driven by AI data centers highlights the emerging challenge of meeting demand amid operational constraints and system-level limitations. See Figure 1.

Figure 1: Projected AI Data Center Electricity Demand as % of U.S. Grid. 2023-2030.^{16,17}



Source: Morningstar Sustainability. For informational purposes only.

Note: This chart reflects an estimated US grid share of electricity demand from AI-related data center growth. The projection is modeled by Morningstar Sustainability using publicly available forecasts from McKinsey & Company and International Energy Agency (IEA, 2024).

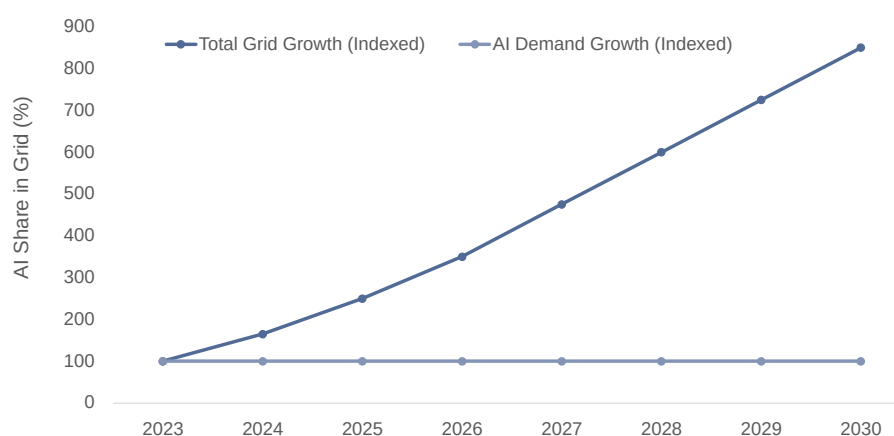
In Northern Virginia, the world's largest data center market, grid operators have started delaying project approvals due to surging electricity demand from AI infrastructure.¹⁸ In states like Arizona and Texas, hyperscale data centers often use water-intensive evaporative cooling systems to enhance efficiency. However, this approach is raising stakeholder concerns in water-scarce regions over potential shortages and resource competition with agriculture—highlighting growing awareness of AI's environmental and social impacts.¹⁹

As a result, operators are increasingly choosing colder regions like the Pacific Northwest and parts of Northern Europe to reduce dependence on mechanical cooling. Cooler ambient temperatures support free cooling, lower electricity use, and reduce operating costs—benefiting long-term sustainability and streamlining permitting in constrained areas.²⁰

Another issue limiting AI infrastructure expansion is supply chain bottlenecks, especially in sourcing chips needed for compute-intensive workloads.²¹ Federal incentives under the CHIPS Act are accelerating domestic semiconductor manufacturing, increasing electricity demand in production hubs.²² At the same time, advancements in chip architecture are improving energy efficiency, as newer AI chips deliver far more performance per watt than previous generations.²³

Despite data center efficiency gains, overall electricity consumption continues to rise due to AI workload scaling.²⁴ AI electricity demand is projected to increase more than eightfold, while overall grid demand rises only ~10%. See Figure 2.

Figure 2. Indexed Growth of AI vs. Total Grid Electricity Demand. 2023-2030.



Source: Morningstar Sustainalytics. For informational purposes only.

Note: Indexed trajectories reflect projected growth in AI-related electricity demand and total US grid demand, normalized to 2023 levels (index = 100). Figures are based on publicly available projections from McKinsey & Company (2024) and the International Energy Agency (IEA, 2024) and are intended to illustrate the scale and pace of potential demand divergence.

The rapid rise in AI-driven electricity use is reshaping power demand profiles. If transmission and generation buildouts fall behind in certain areas, it could result in capacity bottlenecks, increased congestion costs, and delays in infrastructure approvals. This highlights the urgency of expanding grid capacity in regions experiencing rapid data center growth. Choosing cooler climates for data center siting also plays an important role in managing electricity demand, improving energy efficiency, and supporting operational resilience.

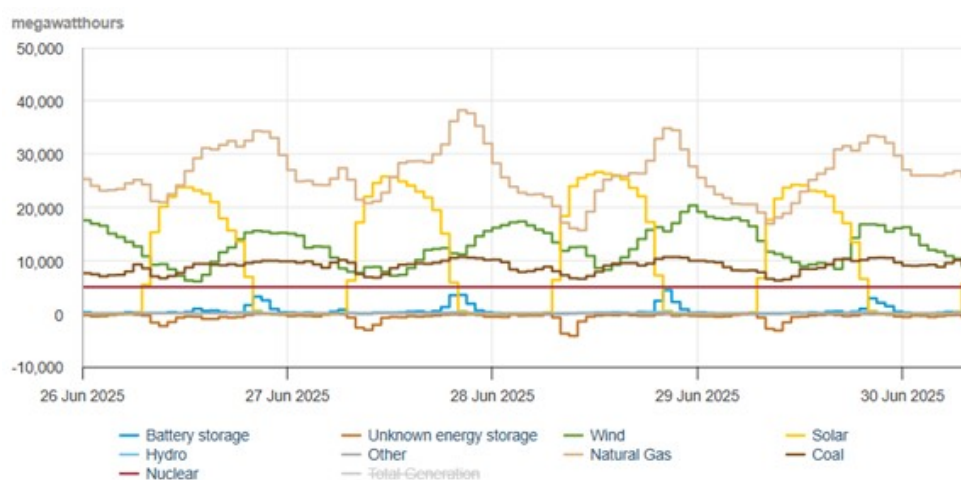
Addressing Energy Supply and Reliability Gaps

According to Pennsylvania-New Jersey-Maryland Interconnection (PJM) analysis, the regional transmission organization that coordinates wholesale electricity movement in parts of 13 states and the District of Columbia, expected retirements of US thermal plants could lead to a 40GW shortfall by 2030.²⁵ The combination of these retirements and rising AI-driven demand is making dispatchable capacity increasingly important for grid stability.

Dispatchable resources like natural gas and hydropower remain vital for grid reliability. They can ramp up quickly to meet demand when solar or wind generation drops, especially during peak hours or extended low-output periods. While data center operators are improving internal efficiency through lower PUE and chip-level optimization, the intensity of AI workloads is pushing demand beyond what current dispatchable infrastructure was built to handle.

The US Energy Information Administration (EIA) publishes real-time regional electricity generation data.²⁶ As shown in Figure 3, in Texas, wind and solar output often spikes and then drops sharply, requiring natural gas to maintain stability. Battery storage also fills brief gaps. Natural gas continues to play a critical backup role, even in renewable-heavy grids like ERCOT.

Figure 3. Texas Region Electricity Generation by Energy Source. June 26, 2025 - June 30, 2025.



Source: US Energy Information Agency (EIA)

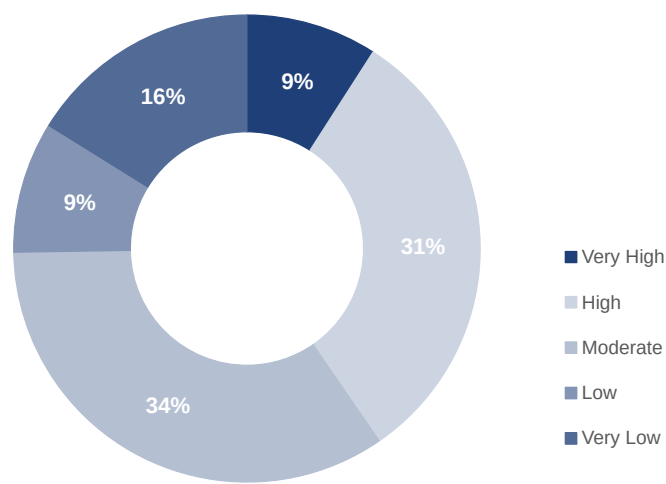
As grid congestion and permitting delays increase in areas like Northern Virginia, developers may shift to underbuilt regions with available transmission and lower-carbon or dispatchable energy sources.²⁷ The types of energy assets dispatched, and how often they are used, will shape emissions outcomes and influence progress toward net zero targets.

Carbon Intensity of US Power Generation

Electricity-related CO₂ emissions vary based on the fuel sources of electricity, and the carbon intensity of power generation varies widely across US states due to differences in fuel sources used.²⁸ From 2016 to 2020, the carbon intensity of US power generation fell by 18%, driven by a shift away from coal and toward natural gas and renewables.²⁹ However, as AI-related electricity demand expands, data centers are increasingly choosing sites in regions where power is abundant and cost competitive. In many cases, these conditions are found in grids that remain heavily reliant on fossil fuels. This dynamic contrasts with Canada's strategy, where provinces like Quebec benefit from hydroelectric baseload and stricter permitting, resulting in cleaner power mixes. If carbon intensity is not factored in, US site selection may undermine broader decarbonization goals.

We analyzed the carbon intensity of generation among US utilities covered in the Morningstar Sustainalytics ESG Risk Ratings universe. This indicator assesses a company’s emissions performance based on its owned power generation facilities in a given fiscal year. Our analysis shows that around 40% of the US utilities assessed are rated as having high or very high carbon intensity of generation (see Figure 4). This highlights a continued reliance on carbon-intensive assets, which raises both transition and regulatory risks.

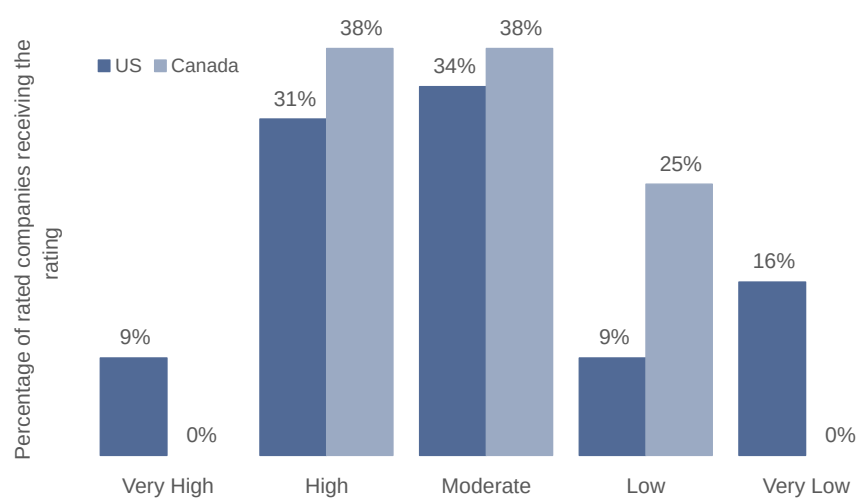
Figure 4. US Utility Carbon Intensity of Generation



Source: Morningstar Sustainalytics. For informational purposes only.
Note: Data is for 32 publicly listed US headquartered Utility companies’ most recent Morningstar Sustainalytics ESG Risk Ratings assessments as of April 17, 2025.

Comparing these US utilities to their Canadian peers reveals a different distribution across carbon intensity ratings. Approximately 40% of US utilities fall into the ‘High’ or ‘Very High’ categories, indicating a wider spread that includes the highest emission tiers. In contrast, nearly three-quarters of Canadian utilities are concentrated in the ‘High’ and ‘Moderate’ categories, with none classified as ‘Very High’. This suggests Canadian utilities are more consistently positioned in the mid-to-high range, without exposure to the very highest carbon intensity levels observed among some US peers. See Figure 5.

Figure 5. US Utility Carbon Intensity of Generation Compared to Canadian Peers



Source: Morningstar Sustainalytics. For informational purposes only.
Note: Data is for 32 publicly listed US headquartered Utility companies’ and 8 publicly listed Canadian headquartered Utility companies’ most recent Morningstar Sustainalytics ESG Risk Ratings assessments as of April 17, 2025.

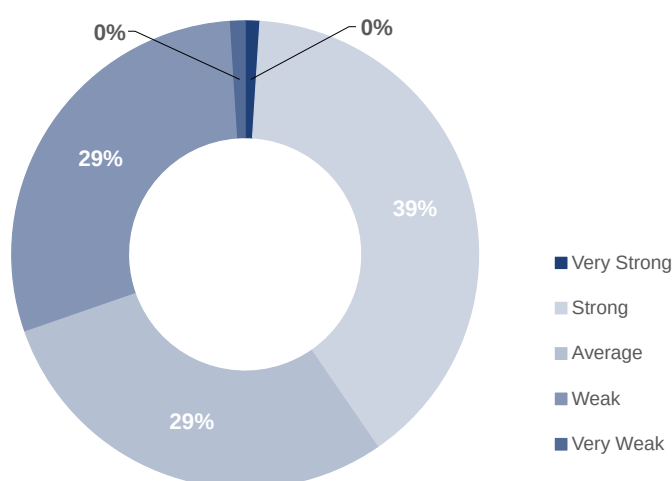
Utility Transition Readiness—Beyond Carbon Intensity

While carbon intensity shows how emissions-intensive a power utility is today, it does not indicate whether the supplier is structurally prepared to decarbonize in line with net-zero pathways. That forward-looking view is provided by Morningstar Sustainalytics' Low Carbon Transition Ratings (LCTR), a framework designed to assess issuer alignment with a 1.5°C scenario.

Within LCTR, the Implied Temperature Rise (ITR) Management Score evaluates a company's readiness based on governance, decarbonization strategy, capital allocation, and implementation progress. It goes beyond public commitments to assess whether the company has the internal capabilities and roadmap to enable meaningful transition.

Among the US utilities assessed under this framework, only 39% are rated strong on transition readiness. Meanwhile, 29% fall into the weak category, and 29% are considered average. No company received a very strong rating. These findings suggest that, despite mounting pressure around clean energy adoption, many US utilities still lack the institutional capacity and operational integration required to align with a 1.5 degrees Celsius pathway. This gap in readiness remains even as AI-driven electricity demand accelerates. See Figure 6.

Figure 6. Transition Readiness of US Utilities (TTR Management Categories)



Source: Morningstar Sustainalytics. For informational purposes only.

Note: Data is for 60 publicly listed US headquartered Utility companies' most recent Morningstar Sustainalytics LCTR (Low Carbon Transition Ratings) as of May 21, 2025.

Subindustries reflected in the chart above include electric utilities, multi utilities, independent power production and traders, gas utilities, and renewable power production.

Future Directions for Reliable and Clean Energy

AI has the potential to transform the energy sector, driving a surge in electricity demand from data centers while also unlocking significant opportunities to cut costs, enhance competitiveness, and reduce emissions.³⁰ In a dynamic and quickly evolving power market like the US, investors should seek to understand the supply and demand for grid electricity and how utilities are meeting reliability obligations while still prioritizing a low-carbon energy transition. Through our engagements with US companies, we have learned that US utilities and power providers are prioritizing opportunities for clean and reliable dispatchable energy, such as SMR nuclear technology, hydrogen, and long duration energy storage.

Although clean technologies capable of addressing the reliability gap hold long-term promise, most remain early stage and require significant policy, infrastructure, and cost breakthroughs to scale commercially. However, realizing this potential requires more than innovation; it requires regulatory agility. In the US, permitting and interconnection delays remain persistent barriers to scaling clean energy. Long queues across Independent System Operators (ISOs) have slowed the integration of new wind, solar, and battery storage capacity, constraining the supply of low-carbon electricity at a time of accelerating AI-related demand. Addressing these challenges through targeted reforms can help unlock clean energy deployment at the pace digital infrastructure growth now requires.³¹

Actionable Steps for Investors

- Assess utility alignment using carbon intensity of generation and ITR Management Scores to understand which companies are better positioned for a low-carbon energy future.
- Engage with utilities and power suppliers rated "Weak" on transition-readiness to encourage improved governance, clearer strategy, and enhanced disclosure around decarbonization planning.
- Support regulatory and permitting reforms that help accelerate the deployment of clean energy and grid modernization.
- Consider regional energy systems characteristics—including reliability and emissions intensity—when evaluating exposure to power markets linked to AI growth.
- Collaborate with utilities, data center developers, and policymakers to help shape scalable, sustainable energy solutions.

Morningstar Sustainalytics' Implied Temperature Rise (ITR) Management Score, part of the Low Carbon Transition Ratings (LCTR) framework, offers a forward-looking view of low carbon transition governance and execution. Carbon Intensity of Generation, sourced from the ESG Risk Ratings, helps quantify baseline emissions exposure. Together, these indicators can inform investor stewardship and engagement strategies on utility transition readiness. Maintaining transparency and incorporating consistent, forward-looking metrics will be critical to supporting informed decision-making.

To read the full research paper, please click here: <https://www.sustainalytics.com/esg-research/resource/investors-esg-blog/ai-s-energy-demand-meets-us-utility-readiness-a-look-at-carbon-intensity-and-transition-risk>.

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London (+44) 20 3514 3123

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Paris (+33) 1 184880642

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