The GRESB Infrastructure Assessment was established to provide capital markets with transparency on the sustainability performance of both private and listed infrastructure funds and assets. Participation has grown rapidly since the inaugural Assessment in 2016, but this growth has mainly been focused on private infrastructure.

The new public disclosure evaluation is designed to provide GRESB’s investor members with greater coverage of the level of ESG disclosure in listed infrastructure. By covering the full GLIO Global Coverage, it will allow us to provide our Investor Members with an ESG evaluation of any listed infrastructure company, not only the companies that participate in the GRESB Infrastructure Assessment.

Investors will be able to see which infrastructure companies are the most transparent with regard to their ESG performance, which companies fall into the mid-range, and which companies fall behind the curve. Moreover, the analysis offers investors the opportunity to exploit these differences in the market.

Methodology and Partnership with GLIO

The sample used for the pilot Infrastructure public disclosure evaluation was the top 66 firms by market capitalization of the Developed GLIO Global Coverage, plus five smaller firms in order to check for variations relating to company size. For each company, we analyzed disclosure on seven ESG aspects across 22 indicators. Each indicator and their respective sub-indicators were awarded zero to full points depending on the availability of evidence. The total score translates into a Public Disclosure Level from A-E. The indicators are shown in Table 1.

A feature of the pilot methodology was a review of the public disclosure data collected from three constituents – Southern Company, Transurban and Zurich Airport. This review gave us valuable insights into

Executive Summary

After carrying out a pilot study on the level of public ESG disclosure of 71 listed infrastructure firms within the GLIO Global Coverage, our pilot’s preliminary results suggest that the infrastructure asset class performs better overall in comparison with real estate.

Comparing the main regions, European infrastructure companies lead the way with companies in Asia Pacific close behind. Americas’ ESG disclosure level was the weakest of the three regions; a result that is consistent with GRESB’s Real Estate Public Disclosure evaluation. Our sectoral analysis found the Airport sector displays the highest average ESG disclosure level.

Please note that these are preliminary results, based on a limited sample size. The outcomes may change as we expand the study to encompass the full GLIO Global Coverage.
the market and how best to assess public disclosure levels in infrastructure. During the full assessment process, all companies will have an opportunity to review the data collected on their own organization. The methodology steps for both the pilot and further expansion is outlined in Figure 1.

The indicators chosen were adapted from those used for the standard infrastructure assessment and the original real estate public disclosure evaluation. The changes included indicator alterations and additions, along with a materiality filter to focus the assessment on the most relevant indicators and ESG issues for each sector. It is worth noting that the original real estate public disclosure evaluation attained coverage of the entire FTSE EPRA/NAREIT Developed and GPR 250 indices. If you want to know more on the matter, please go to: gresb.com/real-estate-public-disclosure.

Results
The pilot findings show that when using GLIO Global Coverage as the representation for the listed infrastructure space, the infrastructure asset class has a high level of public ESG disclosure. More than 60% of firms achieved an A or B as their disclosure level, as shown in Figure 2. These high disclosure levels are also evident when looking at the distribution of the total sample displayed in Figure 3, where a long left-skewed tail is also noticeable.

In comparison with GRESB’s real estate public disclosure dataset, the results suggest that overall, infrastructure companies do a better job on ESG disclosure than their listed real estate counterparts. The boxplot Figure 4.1 exhibits this comparison, with infrastructure’s mean being higher, scoring on average 55% of all possible points, compared to real estate’s 44%. Figure 4.2 shows that a rather

Table 1: List of Indicators in Infrastructure Public Disclosure

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Weight as a % of Points</th>
<th>Description of Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Does the entity have a general sustainability objective?</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Does the entity have specific environmental objectives?</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Does the entity have specific social objectives?</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Does the entity have specific governance objectives?</td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Does the entity publicly disclose information on a dedicated sustainability taskforce or team member that is responsible for the entity?</td>
<td></td>
</tr>
<tr>
<td>Policy &amp; Disclosure</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Does the entity have policies addressing environmental issues?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity have policies addressing social issues?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity have policies addressing governance issues?</td>
<td></td>
</tr>
<tr>
<td>8.4</td>
<td>Does the entity publicly disclose its sustainability performance via a stand-alone Sustainability Report?</td>
<td></td>
</tr>
<tr>
<td>6.0</td>
<td>Does the entity publicly disclose its sustainability performance via a section in the Annual Report?</td>
<td></td>
</tr>
<tr>
<td>12.0</td>
<td>Does the entity publicly disclose its sustainability performance via an Integrated Report?</td>
<td></td>
</tr>
<tr>
<td>6.0</td>
<td>Does the entity publicly disclose its sustainability performance via a dedicated section on the corporate website?</td>
<td></td>
</tr>
<tr>
<td>Risks &amp; Opportunities</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose ESG initiatives and/or case studies that relate to the entity?</td>
<td></td>
</tr>
<tr>
<td>Monitoring &amp; EMS</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>Does the entity maintain or achieve an ESG-Related management standard (accreditation or alignment)?</td>
<td></td>
</tr>
<tr>
<td>Stakeholder Engagement</td>
<td>15.7</td>
<td></td>
</tr>
<tr>
<td>15.7</td>
<td>Does the entity have a stakeholder engagement program?</td>
<td></td>
</tr>
<tr>
<td>Performance Indicators</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose energy consumption data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Does the entity publicly disclose renewable energy data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose GHG emissions data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose water consumption data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose waste consumption data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose air pollutant emission data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose biodiversity and habitat data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose health &amp; safety data of its portfolio?</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Does the entity publicly disclose long-term targets on environmental and social performance?</td>
<td></td>
</tr>
<tr>
<td>Certification &amp; Awards</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Does the entity publicly disclose information on assets that obtained an Asset-Level certification?</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Disclosure levels of total sample

![Figure 2: Disclosure levels of total sample](image)

![Figure 3: Disclosure levels Histogram](image)
large portion of the sample of infrastructure firms we studied score 60% of points or more as compared to real estate listed firms who have more evenly distributed scores across the board.

At the regional level, the strongest scores came from European constituents achieving a B as the mean disclosure level. The Asia Pacific region took an average of 60% of total points available, which translates into a high C. And the North American constituents scored lowest with an average of 48% of total points. These outcomes tell a similar story to the real estate public disclosure evaluation in which the European and Asia Pacific regions scored better than North America. Figure 5 depicts these outcomes.

When analyzing the sectors in the pilot sample, Airports scored 73% of the available points. This was the highest of the infrastructure sectors.

Another interesting finding emerged when reviewing what aspects enabled the highest scoring constituents to differentiate themselves from the rest. As seen in Table 2, the most variation in score, shown by the high standard deviation

“The overall objective is to get more investors looking into companies’ ESG performance – a quick snapshot and a standardized approach to reporting will definitely support this.”

Matthew Brennan, Transurban
While we expected there might be a positive relationship between constituent market capitalization size and disclosure levels, we did not find this to be the case in this pilot sample. This can be seen in the scatterplot in Figure 7.

The scatterplot also highlights the scores of the three constituents who reviewed their data, Southern Company, Transurban and Zurich Airport. All performed at a high level, and although their scores increased slightly following their review of the collected data, it did not result in a material level change.

Again, please note that all conclusions made here are based upon preliminary results and should not be considered ‘final’. A more complete analysis will be conducted in the future based on the full GLIO Global Coverage. Furthermore, only the three constituents mentioned above were provided the opportunity to review and amend the data collected by GRESB.

What are the Next Steps for Infrastructure Public Disclosure
With this pilot complete we intend to expand the analysis in the coming year to capture the entire GLIO Global Coverage. The official Infrastructure public disclosure evaluation process will also incorporate feedback from interviewees, working groups and the GRESB Infrastructure Advisory Board. Looking forward, we will look to refine the scoring with proposed changes, for example to add more weight to the indicator recognizing ESG initiatives and case studies.

How can I Get Involved?
GRESB and GLIO welcome engagement from GLIO supporters – both companies and investors – on this evaluation and results, and the future plans for expansion across the entire GLIO Global Coverage. If you would like to find out more about Infrastructure Public Disclosure, go to: https://gresb.com/infrastructure-public-disclosure.

If you are a constituent of the GLIO Global Coverage, we will collect information on your company and will send you an invitation to review and amend the data on the GRESB portal. You will receive an individual GRESB public disclosure scorecard with your disclosure level from A-E and an analysis of how you perform.

Figure 7: PD Score vs Market Cap

— Stefan Weber, Zurich Airport:

“It gave us some good information about how we could improve our ESG disclosures.”
“The level of detail, and balanced nature of the questions asked regarding ESG were appreciated and make for a robust overview of a company’s transparency on important material topics.”

Aaron Abramovitz, Southern Company

compared to your sector and regional peers. GRESB will also produce a public scorecard detailing the overall scores of the group to give an overview of the universe studied on the various aspects. Examples for real estate public disclosure can be found at: gresb.com/real-estate-public-disclosure. We will reach out to all GLIO supporters to inform them of progress and the data collected and advise on the dates of when the public disclosure evaluation will begin.

More on the Core GRESB Asset/Fund Infrastructure Assessments
GRESB Infrastructure public disclosure is a high-level evaluation that assesses the public ESG disclosures made by listed infrastructure companies. To be clear, it does not assess company ESG performance. The standard GRESB Infrastructure assessment takes this assessment further by evaluating in more detail and including ESG performance. If you are interested in knowing more about the standard GRESB Infrastructure assessment, please go to: gresb.com/gresb-infrastrucure, or contact us: https://portal.gresb.com/help/contact.

List of Sample Constituents from the GLIO Coverage

Aena
Aéroports de Paris (ADP)
Sydney Airport
Fraport
Zurich Airport
Auckland Intl Airport
Ferrovial
NextEra Energy
Enel SpA
Duke Energy
Iberdrola
Southern Co
Dominion Energy
Exelon Corp
American Elec Power
PSE&G
CLP Hldgs
Con Edison
XCEL Energy
PG&E
Edison Intl
WEC Energy
SE
DTE Energy
Eversource Energy
First Energy
Forts
TERNA
Red Electrica
InfraREIT
HK & China Gas
Tokyo Gas
ENN Energy Hldgs
Atmos Energy
Union Pacific
Canadian National Rail
CSX
Norfolk Southern
Canadian Pacific Rail
Kansas City Southern
Central Japan Rail
East Japan Rail
MTR
West Japan Rail
Atlantic
Abertis Infraestructuras
Transurban
Yuexiu Transport Infra
Westshore Terminals
ENGIE SA
National Grid
Sempra Energy
PPL Corp
Centrica
CenterPoint Energy
NISource
Enbridge
TransCanada
Kinder Morgan
ONEOK
Williams Co
Snam
Pembina Pipeline
Cheniere Energy
Targa Resources
American Tower
Crown Castle Intl
SBA Communications
American Water Works
Guangdong Investment
SJW Group

David TASSADOGH

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