

Supplement: Environmental, social, and governance (ESG) factors in infrastructure

Note: This supplemental section was published in March 2023, following the publication of the original six sections of the *Infrastructure Monitor 2022* report.

ESG factors in infrastructure

Key findings

- Infrastructure assets are getting better at setting up ESG policies, plans, systems, and disclosure. In 2022, infrastructure assets improved in all three pillars of ESG (environmental, social, and governance).
- Among the alternative asset classes, infrastructure is the most transparent in its ESG disclosure.
- Improvements in ESG policies, plans, systems, and disclosure are encouraging because they indicate a willingness to improve the sustainability outcomes of infrastructure; however, these improvements do not themselves lead to improved sustainability outcomes.
- Although more infrastructure assets are setting GHG emission targets, still less than half have such targets, and very few have a zero target.
- In 2022, very few infrastructure assets had short-term zero targets and met them.
- To inform investment decisions and reduce infrastructure's significant carbon footprint, the infrastructure sector must capture data on the ESG outcomes of infrastructure assets.

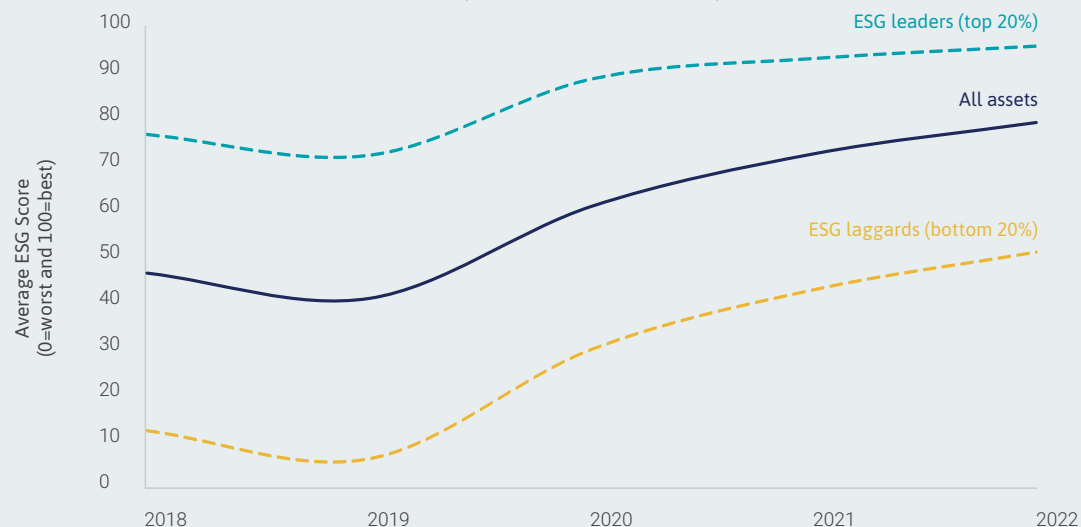
ESG factors in infrastructure

Infrastructure assets are getting better at setting up ESG policies, plans, systems, and disclosure.

GRESB is currently the market leading source of ESG data for infrastructure assets. Annually, GRESB collects data on ESG via its *Infrastructure Asset Assessment* and calculates an ESG Score using a bespoke methodology and framework. This ESG Score reflects the extent to which assets have ESG policies in place, manage ESG risk, report transparently on their most material ESG issues, and have current and future ESG targets.

According to GRESB's *Infrastructure Asset Assessment*, the average ESG Score for infrastructure assets continued to increase in 2022. This improvement was evident across all assets. ESG Leaders (top 20% of reporting assets) and ESG laggards (bottom 20% of reporting assets) have both increased their scores over time.

GRESB ESG Score for infrastructure assets, 2018–2022
(0=worst and 100=best)



Source: GI Hub analysis based on GRESB *Infrastructure Asset Assessment*.
Notes: Analysis presented in this section excludes some assets included in GRESB's assessment, as they are not considered as infrastructure by the GI Hub, such as oil, gas, and defence assets. It also excludes diversified/multi-sector assets. Also note that although ESG Scores have been subject to some methodological changes and changing component weights over time, they are still comparable across years.



ESG factors in infrastructure

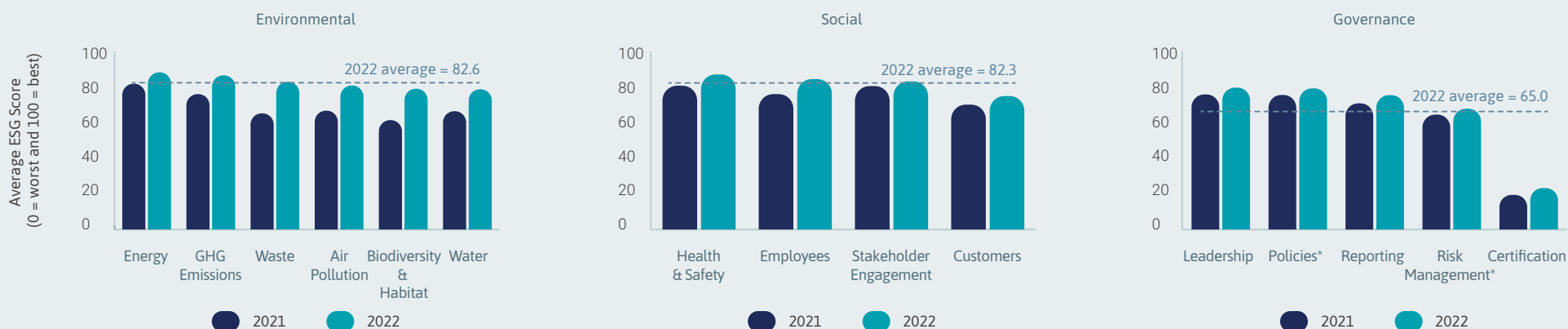
In 2022, ESG Scores for infrastructure assets improved in all three pillars of ESG.

In 2022, the ESG Scores of infrastructure assets improved across all three pillars of ESG (environmental, social, and governance). However, on average, assets score better in the environmental and social pillars; scores in the governance pillar are lagging. This is primarily due to the Certification aspect of Governance, which assesses the asset’s achievement and/or maintenance of ESG-related certifications and awards. The relatively low score for this aspect reflects the inherent difficulty and cost of obtaining ESG certification. Certifications typically involve lengthy application and verification processes, often for a fee.

The highest score on any individual aspect of ESG in 2022 was on Energy. The score for Energy reflects the extent to which an asset reports on and sets targets for energy sold or consumed. The next highest score on an individual aspect was on Health and Safety (the extent to which an entity reports on health and safety of employees and contractors, users, and the local community). These two aspects also had the highest scores in 2021.

Promisingly, this year the data reflect how ESG objectives are gradually expanding beyond a narrow focus on energy and GHG emissions. In 2022, scores improved significantly for Waste (the extent to which an asset reports on and sets targets for waste generation and disposal) and Biodiversity (the extent to which an asset reports on and sets targets for biodiversity impact, measured by net habitat gain). These were two of the lowest-performing aspects of ESG in 2021. The increasing scores in these areas reflect the rising prominence of these issues on ESG agendas, supported by increasing global action on this front (e.g. circular economy policies such as those led by the EU’s Circular Economy Action Plan, and the establishment of the Taskforce on Nature-related Financial Disclosures [TNFD] framework).

ESG Scores for infrastructure assets by ESG pillar, 2021 vs. 2022
(0=worst and 100=best)



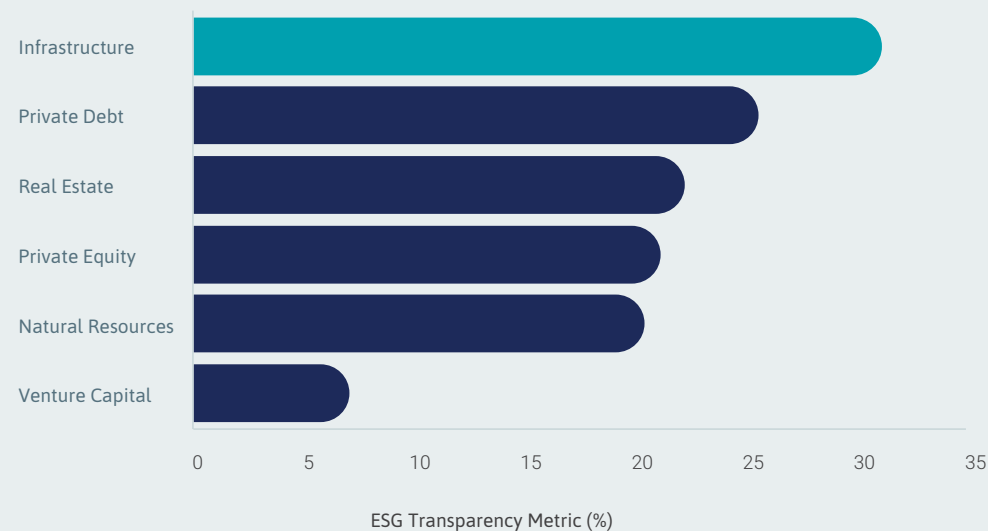
Source: GI Hub analysis based on GRESB Infrastructure Asset Assessment.
Note: The Policies and Risk Management components contribute to three pillars but have been included in the Governance pillar for the purpose of this chart.

ESG factors in infrastructure

Among the alternative asset classes, infrastructure is the most transparent in its ESG disclosure.

In addition to showing improvements in ESG policies, plans, systems, and disclosure over time, infrastructure assets also perform well when compared with other alternative asset classes (i.e. investments outside of traditional asset classes such as stocks, bonds, and cash). According to Preqin, infrastructure is the most transparent asset class on average and exhibits the highest level of disclosure on ESG issues.

Average ESG Transparency Metric across private capital fund managers by asset class, 2022
(0%=lowest transparency and 100%= highest transparency)



Source: Preqin (2022a).

Note: The ESG Transparency Metric is calculated as the percentage of ESG indicators (37 in total) that are publicly or privately disclosed to Preqin. The more indicators that are reported on, the higher the transparency metric.

ESG factors in infrastructure

Improvements in ESG policies, plans, systems, and disclosure are encouraging; they indicate a *willingness* to improve the sustainability outcomes of infrastructure.

However, these improvements do not themselves lead to improved sustainability *outcomes*.

For example, data on targets for GHG emissions shed some light on progress toward decarbonisation as an outcome.

ESG factors in infrastructure

Although more infrastructure assets are setting GHG emission targets, still less than half have such targets, and very few have a zero target.

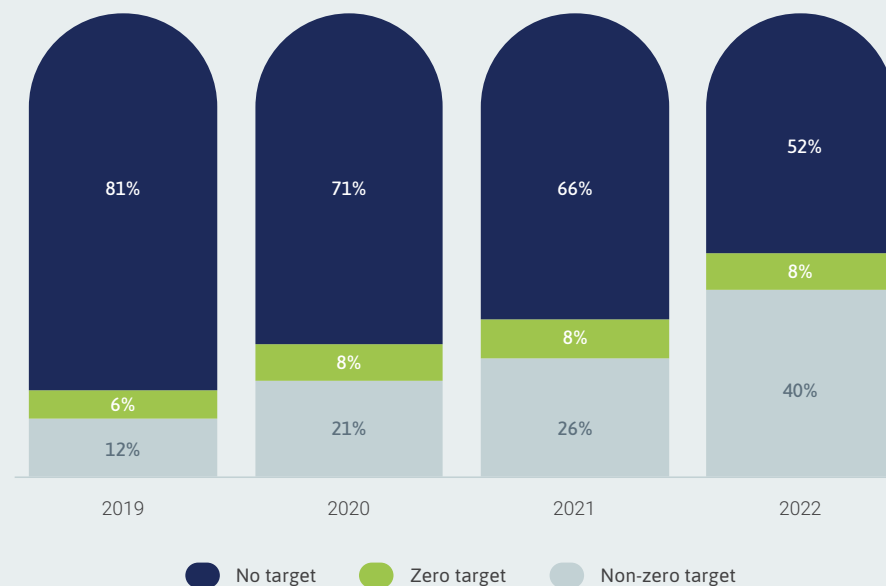
Data collected by GRESB on the existence of GHG emission targets for infrastructure assets show that the share of assets setting a long-term emission target covering both direct and indirect emissions has increased from 18% in 2019 to 48% in 2022.

Although this increase is encouraging, the fact remains that more than half of the assets that are reporting currently do not have a long-term target.

Moreover, among the infrastructure assets that have set long-term targets, only 16% have a target of zero emissions. This means that overall, only 8% of infrastructure assets are targeting zero.

Reviewing these data, it is clear that despite increased recognition of the need to reduce emissions, neither the level of target setting nor the ambitions of the targets being set are aligned with what is required to make economies more sustainable.

Long-term GHG emission target setting for infrastructure assets, 2019–2022
(% of total reporting assets)



Source: GRESB *Infrastructure Asset Assessment*.

Note: Targets refer to Scope 1, 2, and 3 GHG emissions. Scope 1 = Direct emissions from sources owned or controlled by the entity. Scope 2 = Indirect emissions created by the generation of purchased energy. Scope 3 = All other indirect emissions as a result of the entity's activities throughout its entire value chain.

ESG factors in infrastructure

In 2022, very few infrastructure assets had a short-term zero target and met it.

Data on short-term GHG emission targets are a window into immediate intentions and progress on emission reduction.

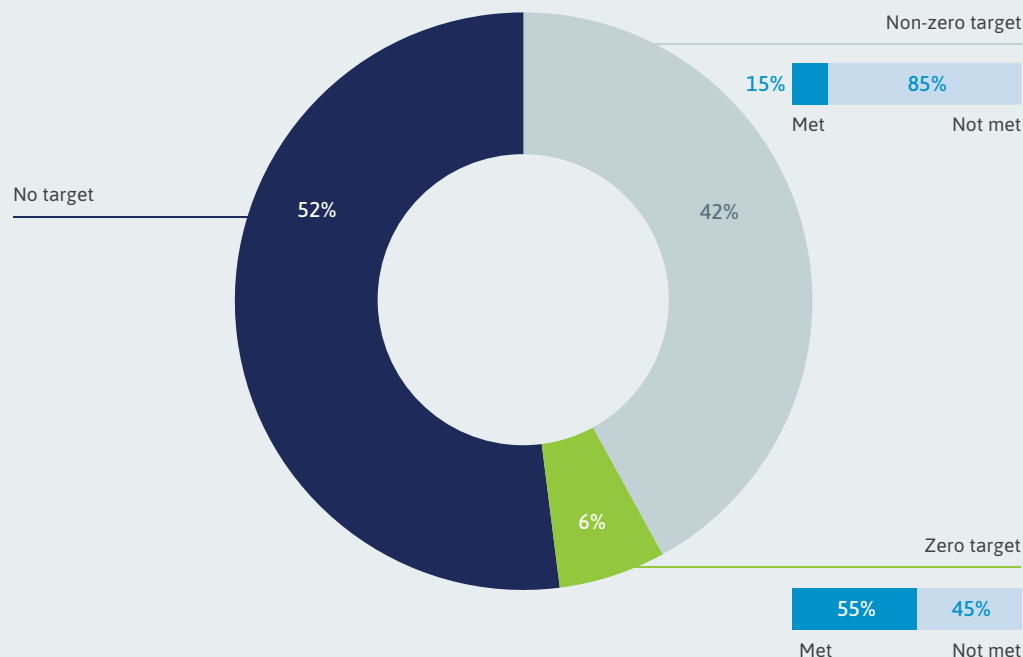
In 2022, less than half (48%) of infrastructure assets had a short-term GHG emission target. Among them, only 12% had a target of zero emissions. This means that overall, only 6% of infrastructure assets targeted zero in the short term.

And, few infrastructure assets are currently meeting their targets. In 2022, only 20% of short-term targets were met.

Interestingly, 55% of the zero targets set were met, compared with 15% of the non-zero targets. In other words, assets that have set a more ambitious target of zero are more likely to be meeting it. This could suggest that assets which are more determined to reduce emissions set more ambitious targets.

Overall, out of all infrastructure assets that reported in 2022, only 3% had a short-term zero emissions target and met it.

Infrastructure asset short-term GHG emission targets, 2022
(% of total reporting assets)



Source: GRESB *Infrastructure Asset Assessment*.
 Note: Short-term targets are targets set for the current year (in this case, 2022). Targets refer to Scope 1, 2, and 3 GHG emissions.
 Scope 1 = Direct emissions from sources owned or controlled by the entity. Scope 2 = Indirect emissions created by the generation of purchased energy. Scope 3 = All other indirect emissions as a result of the entity's activities throughout its entire value chain. 'Target met' indicates that the asset's reported GHG performance value for the current year matches its current year target.

ESG factors in infrastructure

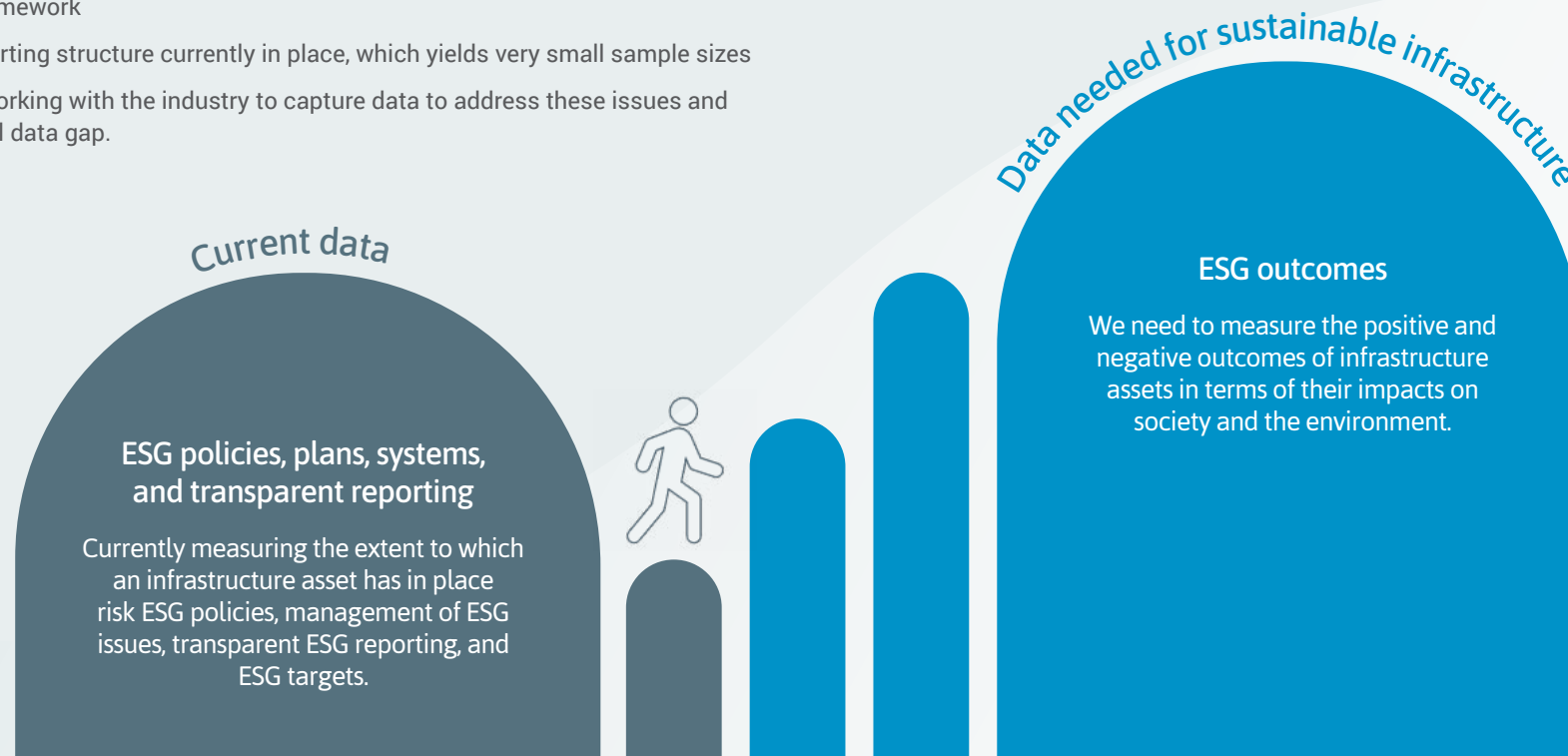
The infrastructure sector must move to capture data on the ESG outcomes of infrastructure assets.

To inform investment decisions and reduce infrastructure's significant carbon footprint, the sector must begin capturing data on the ESG outcomes of infrastructure. Currently, and across the majority of data providers, data on ESG in infrastructure generally reflect an entity's ESG management approach (e.g. policies, plans, and systems) and transparency of reporting.

Some quantitative performance data (such as data on GHG emissions) are collected. But evaluations of the ESG outcomes of infrastructure are not available because of:

- The difficulty of assessing performance in the absence of clear and agreed indicators and a standardised framework
- The voluntary reporting structure currently in place, which yields very small sample sizes

GRESB is currently working with the industry to capture data to address these issues and help close this critical data gap.



Appendices



Environmental, social, and governance (ESG) factors in infrastructure

Alternative asset classes	Alternative asset classes refer to investments outside the traditional asset classes of stocks, bonds, and cash. They include assets such as real estate, private equity, and infrastructure.
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Environmental, social, and governance (ESG) factors in infrastructure

1. Data on infrastructure sector ESG performance are critical to catalysing more private investment in sustainable infrastructure. However, such data are currently very limited, particularly at the asset level.
2. For the analysis presented here, the GI Hub collaborated closely with GRESB to present findings from *GRESB's 2022 Infrastructure Asset Assessment*, currently the market leading source of ESG data for infrastructure assets.
3. GRESB's ESG Score encompasses management and performance measures, but does not reflect the ESG outcomes of infrastructure assets. Instead, scores reflect the extent to which assets have ESG policies in place, manage ESG risk, report transparently on their most material ESG issues, and have current and future ESG targets. In other words, an asset is assessed on *whether it reports on GHG emissions* rather than on *the amount of GHGs emitted*. GRESB is working with the infrastructure industry to reflect outcomes in the ESG Score in future years, to close this critical data gap.
4. Sample size: The analysis presented in this section excludes some assets included in GRESB's assessment, as they are not considered as infrastructure by the GI Hub, such as oil, gas, and defence assets. It also excludes diversified/multi-sector assets.
5. GRESB's data represent only a sample of the universe of infrastructure assets reporting on ESG. However, the data can still be interpreted as indicative of the broad market trends in ESG in infrastructure. The total number of assets included in the analysis is 553 in 2022, 475 in 2021, 346 in 2020, 318 in 2019, and 176 in 2018.
6. This section also draws on Preqin's ESG transparency data, collected from about 35,000 private capital fund managers. The ESG Transparency Metric is calculated as the percentage of ESG indicators (37 in total) that are publicly or privately disclosed to Preqin and is calculated as follows:

$$\text{Preqin ESG Transparency Metric} = \text{ESG KPIs disclosed} / \text{Total ESG KPIs}$$

Preqin's Transparency KPIs identify and track indicators relevant to ESG policies, practices, and initiatives and are selected from ESG frameworks and standards like the United Nations Principles for Responsible Investing (UNPRI) and Sustainability Accounting Standards Board (SASB).

7. Preqin's ESG data compare transparency among alternative asset classes. Alternative asset classes refer to investments outside the traditional asset classes of stocks, bonds, and cash. They include assets such as real estate, private equity, and infrastructure.

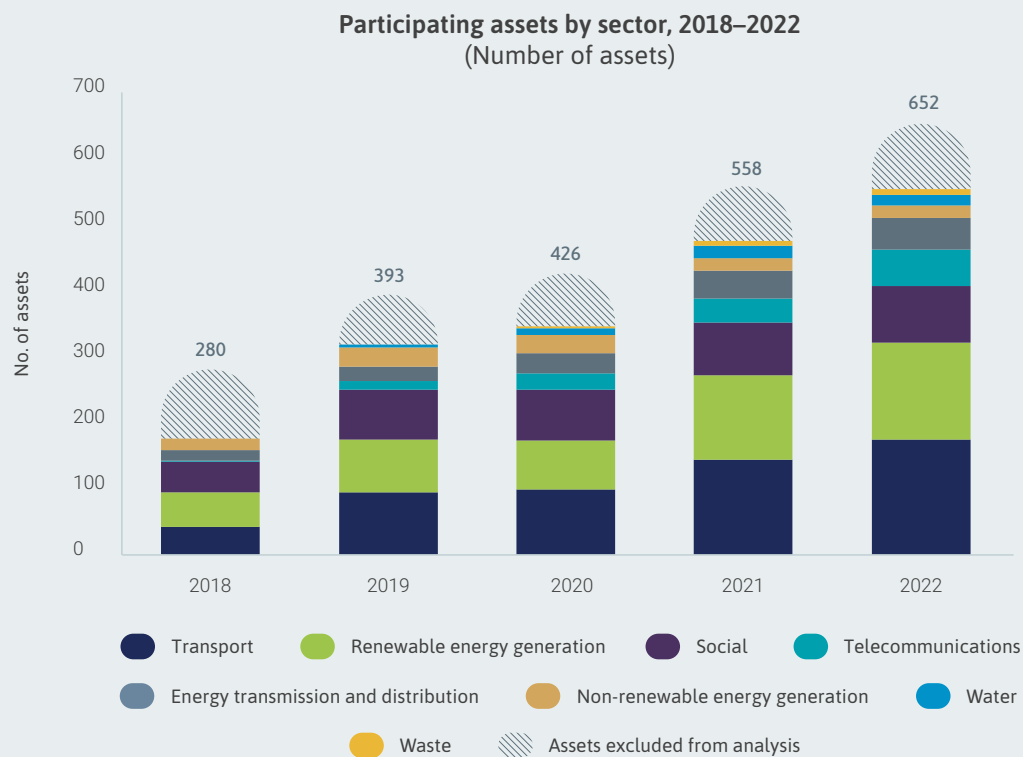
Environmental, social, and governance (ESG) factors in infrastructure

Sample distribution by sector

Transport was the most represented sector in GRESB’s *Infrastructure Asset Assessment* in 2022, accounting for 31% of participating infrastructure assets, followed closely by the renewable energy sector at 27%. This trend in ESG reporting aligns with broader investment trends, with these sectors being the two leading sectors for private investment in primary infrastructure projects.

The social infrastructure sector – mostly health and education assets – is also a strong participant with 16% of reporting assets in 2022.

Consistent with the increasing global shift towards digital connectivity, there has also been a notable increase in the number of telecommunications assets reporting on ESG.



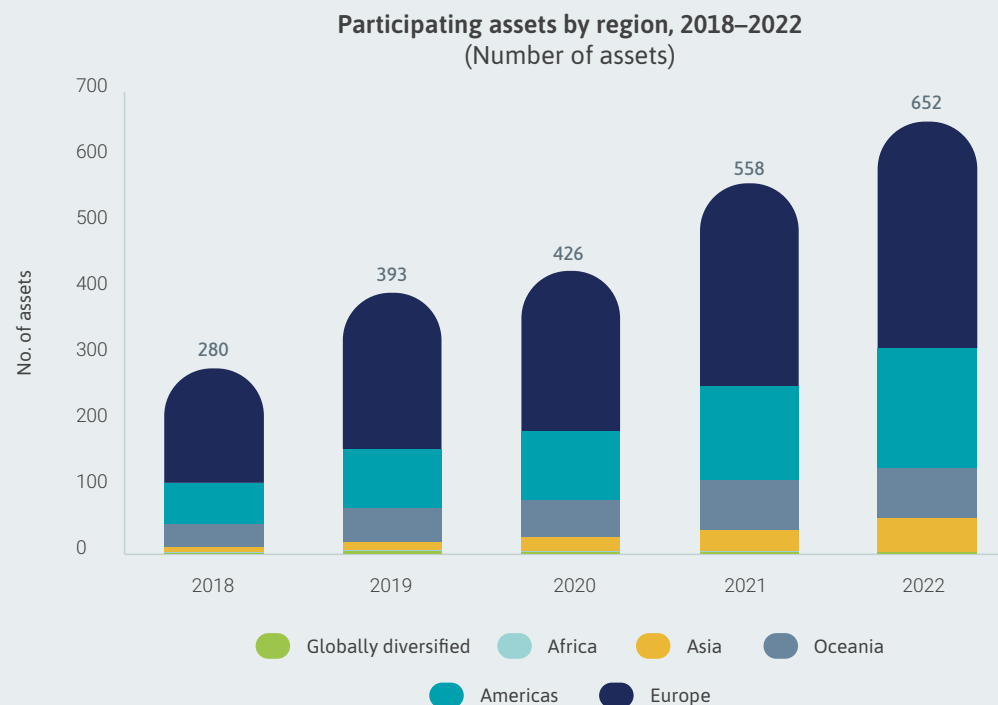
Source: GI Hub analysis based on GRESB *Infrastructure Asset Assessment*.
 Note: Assets excluded from analysis are assets that are included in GRESB’s assessment but are not considered as infrastructure by the GI Hub, such as oil, gas, and defence assets as well as diversified/multi-sector assets.

Environmental, social, and governance (ESG) factors in infrastructure

Sample distribution by region

Western Europe represented more than half of the participating GRESB assets in 2022 – more than double the second most prevalent region, North America. Western Europe is widely recognised as a global leader in ESG reporting and disclosure and has been the dominant participant in GRESB's *Infrastructure Asset Assessment* since its inception. This reflects the relatively more advanced development of regulations for ESG reporting and disclosure in Europe, such as the EU's Taxonomy and the Sustainable Finance Disclosure Regulation (SFDR).

While the number of participating assets outside these two regions remain relatively low, most regions have recorded greater participation over time – most notably Asia. Asia has traditionally lagged Western Europe and North America, as the region is more fragmented and lacks unified regulation and standards. Regional disclosure frameworks are not as well established, there is no single governing body that can help create a unifying taxonomy, and global ESG standards and frameworks are not universally adopted (Preqin (2022b)).



Source: GI Hub analysis based on GRESB *Infrastructure Asset Assessment*.

Appendix 3

References

Preqin (2022a). 2022 Preqin Global Infrastructure Report. January 2022.

Preqin (2022b). ESG in Alternatives 2022: The Transparency Tipping Point. June 2022.

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