

## Indicator of Change

Our proprietary ESG database contains a selection of ESG datapoints for companies under Morgan Stanley coverage globally. Improving or deteriorating ESG data can be a sign of a change in ESG risk within a company. By looking at the data and trends over time, it is possible to identify red or green flags. For example, a sudden increase in employee turnover might be an indicator of low morale and poor productivity. Or, a drop in lost time injury rates could conversely suggest that operational control has improved.

We believe the direction of travel is most important. Traditional investment decisions are often based on identifying an inflection point in earnings, cash flow or cost of capital. ESG should similarly consider how a company is changing. As such, we are looking for signs of ESG data and performance improving or deteriorating.

The MS Indicator of Change is designed to provide a quick and easy to understand snapshot of whether a company's ESG data is improving or deteriorating year on year. The score is defined for a given year as the balance of the number of rising metrics minus falling metrics over the total number metrics reported. For an improving metric, the company is awarded +1 and for a deteriorating metric the company receives -1. As such, the total end score ranges from +1.0 (indicating that all the reported metrics are improving compared to the previous year) to -1.0 (indicating that all the metrics reported by the stock deteriorated compared to the previous year).

In the chart, we show the Indicator of Change over time for each of the three pillars of Environmental, Social and Governance in addition to a combined score.

We also consider the amount of data that a company discloses. For each sector, we determined a number of relevant metrics which we believe would be key to assessing companies' ESG performance. We then collected data from companies across our European coverage universe, and mapped it to these metrics, where available. For each company, a metric is considered "disclosed" if we could find data for at least one variable in the category. The disclosure rate is defined as the number of metrics that are disclosed over the total number of metrics we considered for the relevant sector.