For professional and institutional investors - January 2024

CREATING VALUE WITH OUR PROPRIETARY ESG SCORES

At BNP Paribas Asset Management, we are committed to generating long-term sustainable investment returns for clients, while having a positive impact on the environment, the economy and society. We believe that analysing investments using environmental, social and governance (ESG) criteria helps us take into account a wider set of risks and opportunities, and make better-informed investment decisions.

Our ESG scoring framework is central to our sustainable investment approach. Covering more than 13 000 issuers of securities, it provides insights that help our portfolio managers pinpoint a company's performance on material ESG issues, and integrate these into their investment decisions.

THE CASE FOR PROPRIETARY ESG SCORING

We believe that our proprietary scoring framework is essential to evaluate an issuer's ESG performance given four key limitations to relying on third-party ESG scoring models.

First, ESG scores by external providers are often an aggregation of sometimes more than 100 metrics, turning the score into a '**black box**'. This can blur the picture. We believe in the merits of looking beyond the ESG score at individual metrics and components that can be valuable sources of insight into investment risk and opportunities.

Second, the metrics selected by third-party providers often reflect **subjective opinions and biases**. Some of the selected metrics may not be **material or insightful**.

Third, we apply an additional layer of data quality and control to the underlying metrics we source from third parties, which narrows our focus on the indicators which we deem to have the required coverage and quality. We also directly implement data corrections and overlays to correct data, update it or infuse it with our first-hand knowledge and insights.

Lastly, some third-party ESG scores are skewed towards **rewarding companies based on ESG disclosure** rather than on ESG performance. There is a rising tide of interest in ESG from investors and pressure from regulators on companies to disclose ESG data. In fact, some **75% of ESG data points from providers concerns policy metrics**.[1] Increased ESG disclosure is welcome, but it does not necessarily improve the way an issuer deals with the issues. In our view, it is important to focus on performance, not just disclosure.

BNPP AM'S ESG SCORING PROCESS

All four issues may cause a company to receive different ESG scores from different providers, blurring an issuer's actual ESG performance. **This is what we aim to address with our proprietary ESG scoring framework**.

1. ESG METRIC & WEIGHT SELECTION
2. ESG ASSESSMENT VS PEERS
3. QUALITATIVE REVIEW
4. FINAL ESG SCORE

1 Source: Thomson Reuters, Bloomberg, FactSet, Company Data, Goldman Sachs Global Investment Research, November 2019. Based on available ESG data for the MSCI ACWI universe.

BNP PARIBAS ASSET MANAGEMENT

The sustainable investor for a changing world

1 ESG METRIC & WEIGHT SELECTION

A FOCUSED APPROACH REWARDING PERFORMANCE ON MATERIAL ESG ISSUES THAT MATTER MOST FOR COMPANIES

Our approach is based on two critical beliefs:

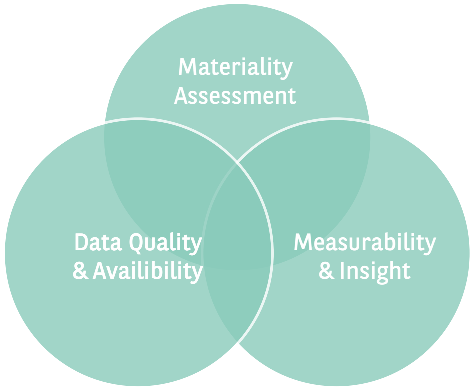
- **Sustainability is imperfectly understood**, under-researched and mispriced in the markets.
- **Not all ESG issues matter equally**: companies that do well on material topics outperform the market, even if they have a poor performance on immaterial issues.

To arrive at ESG scores that provide investment useful insights, we select metrics using three criteria:

Materiality:
We reward companies that score highly on ESG issues that are material to their business, based on the expertise from our Sustainability Centre as well as external frameworks and empirical studies

Measurability and insight:
We preference insightful performance metrics over policies or programmes

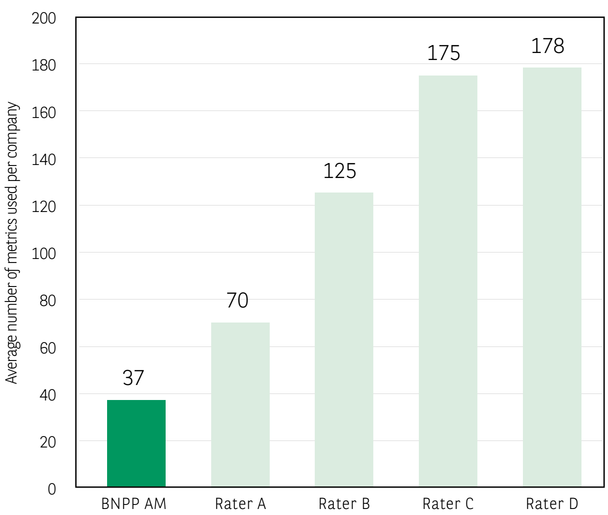
Data quality and availability:
We favour metrics for which data is of reasonable quality and readily available so that we can compare issuers fairly.



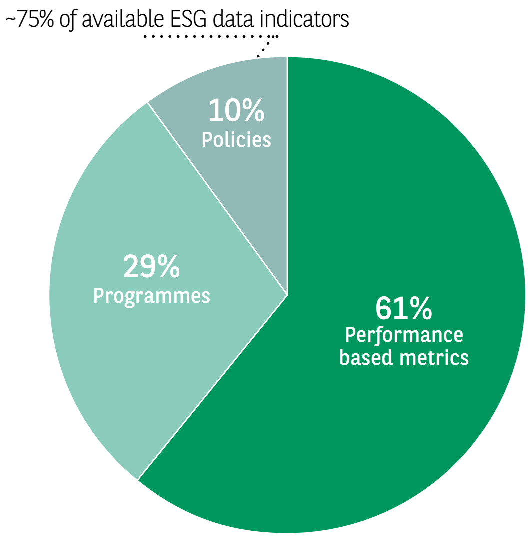
As a result of this stringent approach, our ESG scoring framework is **markedly differentiated,** using a **focused set of ESG metrics**, with a **clear preference for performance over policy metrics**.

Using a limited set of relevant ESG metrics

(Average number of ESG metrics used per sector)



With a clear focus on performance metrics



Source: BNP Paribas Asset Management, June 2020. Based on Thomson Reuters, Bloomberg, FactSet, Company Data, Goldman Sachs Global Investment Research

2 ESG ASSESSMENT VS. PEERS

SECTOR-RELATIVE SCORES, WITH AN ABSOLUTE 'TILT'

Our scoring framework reflects the fact that **ESG risks and opportunities are not always comparable between sectors and regions**. Therefore, we have divided the issuers covered into 20 sectors and 4 geographical areas, creating 80 groups of geographical and sector peers.

Each issuer starts with a baseline 'neutral' score of 50. We add or subtract contributions from each metric. An issuer receives **a positive contribution if it performs better than its peer average**. If it performs below average, we subtract from its score. The overall result is a quantitative ESG score ranging from 0 to 99, with the ability to see how each ESG pillar has added to or detracted from that final score.

Beyond the selected sector-specific metrics and weight, we enable two measures to affect all issuers in a uniform way; introducing a **deliberate, absolute ESG scoring 'tilt'** for the most exposed sectors. The measures are:

- **Carbon emissions** – As the world faces an absolute carbon emissions problem, we implement an absolute carbon emission measure, creating a positive bias towards issuers and sectors with lower carbon emissions
- **Controversies** – Sectors that are more prone to ESG controversies have slightly lower scores, reflecting increased risk ('headline', reputational or financial risk).

3 QUALITATIVE REVIEW

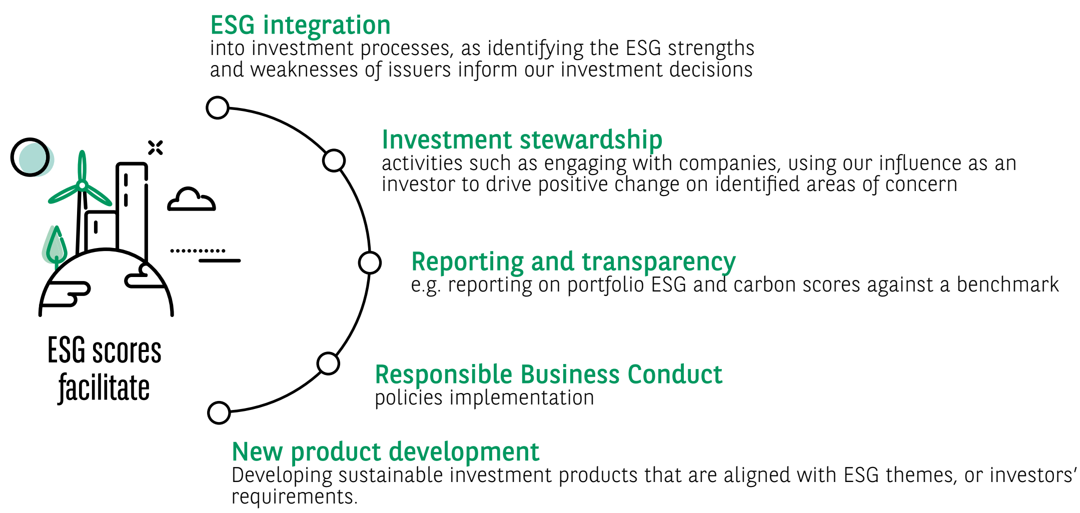
In addition to refining and combining third-party data, we **integrate insights** from our **Sustainability Centre**'s in-depth research on material issues (e.g. climate change) and our **investment teams'** knowledge and interaction with issuers.

These qualitative insights are used:
- To **correct provider data** that was not available, factually incorrect or outdated, or which we disagree with (e.g. the assigned severity of an ESG controversy)
- To capture **insights** about how ESG scores may evolve and issues not captured by our selected metrics, in the form of a qualitative overlay.

4 FINAL ESG SCORE

The combined qualitative and quantitative ESG score ranges from 0 to 99, with issuers ranked in deciles against peers. Issuers which are excluded from investment (through our Responsible Business Conduct policy) are assigned a score of 0.

Our investment teams use ESG scores and research in a number of ways. They facilitate:



Source: BNP Paribas Asset Management, November 2023

POWERED BY THE EXPERTISE OF OUR SUSTAINABILITY, INVESTMENT AND QUANTITATIVE TEAMS

Our proprietary ESG scoring system benefits from the combined knowledge and expertise of three teams, helping to **generate robust ESG insights for better-informed decisions**.

Sustainability Centre (SC)

- Selects data providers, and assigns metrics and weights to sectors
- Assesses data quality and coverage (with the Quantitative Research Group)
- Manages data corrections and qualitative overlays
- Regularly reviews sectors to identify key trends, and update data model and overlays accordingly

Quantitative Research Group (QRG)

- Analyses data quality, bias and metric correlations to inform and enhance the selection of metrics
- Normalises the distribution of metrics scores
- Provides technical expertise and solutions to build and maintain a robust scoring framework

Investment teams

- Involved in every step of the ESG scoring development process and related enhancements
- Provide inputs for data corrections and overlays
- Utilise scoring to support investment decision making

IN CONCLUSION

BNPP AM's proprietary ESG scoring framework is:

- **Comprehensive**: Covering more than 13 000 issuers
- **Focused on materiality**: Using a limited number of material, insightful metrics for each sector
- **Investment insight driven**: Built with and for investment professionals
- **Robust**: With a statistically rigorous model developed with our Quantitative Research Group
- **Dynamic and forward-looking**: Integrating unique insights through qualitative overlays
- **Managed by the Sustainability Centre**: to ensure the integrity and consistency of the framework

Thanks to these features, we believe our ESG scoring is a powerful tool to help investment teams **generate long-term sustainable investment returns for investors**.

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