

Executive Summary

The relationship between sustainability and financial performance has long been a central concern for business leaders, investors, and academics. Despite decades of research, the question remains unresolved: Does it pay to be sustainability-focused? Is there a positive, neutral or negative correlation between firms' sustainability performance, as captured by ESG scores, and shareholder returns?

The status quo in answering these questions is, unfortunately, a state of “aggregate confusion”, as shown by recent research work from MIT¹. Both academic and practitioner research yield conflicting or, at best, inconclusive, results. The core issue lies in the fact that most of the debate and related research has focused on assessing firm-level attributes tied to the quality of their impacts. These assessments are often based on subjective, non-transparent, and inconsistent judgments across different evaluators, which only compounds the problem. What is missing is a systematic, quantitative, and objective evaluation of what firms are actually doing to realise their impact ambitions on society and the environment.

This report proposes an innovative approach to tackle this structural problem by presenting a new assessment system for corporate impact, based on the systematic, structured evaluation of observable corporate sustainability behaviours. This study draws on the GOLDEN Sustainability Dataset– developed as part of our work and the largest structured dataset of its kind, containing over 1 million initiatives from 15,000 companies across all sectors and headquartered in more than 80 countries. The dataset is used to develop and test a novel empirical framework to explore the relationship between business impact maturity and financial performance.

The corporate initiatives, identified and categorised through state-of-the-art natural language processing (NLP) algorithms according to their objectives (using the 17 UN SDGs) and their behavioural content (14 categories of sustainability actions, mutually exclusive and exhaustively covering all reported actions).

For the purpose of this analysis, we organised the 14 action types into three broad categories:

1. **Advocacy** – Externally oriented actions such as donations, volunteering, and community engagement.
2. **Preparation** – Internal efforts like training, incentives and the introduction of impact measurement systems.
3. **Transformation** – Organisational and operating change, as well as innovation-driven initiatives embedded in products, business models, and value chain partnerships.

This behavioural taxonomy, built from an underlying impact maturity model, allows for cross-sectoral benchmarking, temporal analysis, and direct connection to both financial performance and environmental impact.

Key Findings

Transformational Sustainability Actions Drive Superior Risk-Adjusted Shareholder Returns

Portfolios created by selecting companies in the highest tertile of Transformation initiatives outperform market returns and portfolios created with companies in highest tertiles of Advocacy or Preparation actions. This effect is strong on an absolute level, with a **2.7% annual alpha**, translating into a **40.7% cumulative, risk-adjusted, abnormal return over the 13 years** of observation of the study.

1. Symbolic vs. Substantive Transition

Our findings provide empirical validation of what many practitioners suspect: not all sustainability actions generate equal returns.

- High levels of Advocacy behaviour – often associated with “greenwashing” – correlate with lower financial performance.
- ESG ratings disproportionately reward Preparation-stage initiatives – those most visible, auditable, and risk-focused – yet these assessments are not positively correlated with improvements in company performance, measured either accounting or as financial terms.

1 Berg, F., Kölbel, J. F., & Rigobon, R. (2022). Aggregate confusion: The divergence of ESG ratings. *Review of Finance*, 26(6), 1315-1344.
Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. (2016). Do ratings of firms converge? Implications for managers, investors and strategy researchers. *Strategic management journal*, 37(8), 1597-1614.

2. A New Concept: Business Impact Maturity (BIM)

This report introduces the concept of Business Impact Maturity, defined as the progressive alignment of business purpose, strategy, structure, and culture toward the creation of systemic wellbeing.

The Impact Maturity Ratio – the proportion of Transformational to Advocacy actions – emerges as a robust proxy for the progressive development of this alignment at increasing levels of impact maturity. Importantly, the data shows a strong and robust correlation between this ratio and financial performance².

A New Role for Financial Institutions

Building on these insights, the report introduces the Impact Finance Maturity Model, a strategic framework designed to guide financial institutions in aligning capital with systemic change. It classifies financial actors along two axes:

1. **Institutional Influence** – Degree of governance or strategic control over investees (e.g., minority vs. majority ownership).
2. **Strategic Depth** – The level of intentionality and systemic ambition in financial practices (e.g., passive screening vs. transformational goals).

This model enables financial actors to identify their current position and chart a course toward high-impact, finance.

By integrating behavioural insights, financial actors can identify firms positioned for sustainability-driven innovation and strategic advantage – ensuring that capital not only seeks return but drives systemic regeneration.

Institutional Implications

Asset Managers can enhance alpha by integrating behavioural maturity signals into index construction and portfolio design, moving beyond ESG score overlays to investment strategies based on sustainability-related behavioural models.

Commercial Banks can embed sustainability KPIs (e.g., tied to maturity signals) into loan covenants and pricing models, as well as develop new capabilities for sustainability-linked advisory services.

Private Equity firms with high governance control, can accelerate enterprise transformation through employee ownership, value chain redesign, and SDG-related growth strategies.

Sovereign Wealth Funds and Development Banks are able to lead systemic transitions through SDG, sector or geographic thematic funds, leveraging aggregated behavioural data and insights.

Conclusions

This report builds on new data and methodologies to share that corporate sustainability behaviours – not just intentions or ratings – are powerful predictors of financial outperformance and systemic impact.

Key Messages:

- Behavioural maturity matters. Companies that operationalise sustainability in their growth and innovation strategies outperform on both financial and societal dimensions.
- ESG ratings are out of target. Scores, as currently computed, reflect compliance and preparation, but not transformational behaviours.
- Finance can evolve. Financial institutions now have new tools and frameworks to assess, support, and co-create system-level change.

² In prior research, published on Nature Communication, the same data shows that sustainability-driven innovation distinguishes companies with net-zero strategies and emission pathways aligned Paris Agreement targets.

Authors

Matteo Burrato, Mojtaba Nouri, Filippo Pellegrino,
Livio Scalvini, Maurizio Zollo

Acknowledgments:

Special thanks go to Cathy Gray, and to Hana Amer and Greg Brina from the Leonardo Centre for their contributions and support in the development of this report.

In preparing this report, the authors have relied upon appropriate available data, information and industry standards at the time of writing. It contains various statements and opinions that are or could be “forward-looking” statements, however a number of risks, uncertainties and other important factors could cause actual developments and / or results to differ materially from expectations. This report should not form the basis of any third party’s decision to undertake, or otherwise engage in, any activity and third parties do not have any right to rely on it. The report, by its nature, is not comprehensive and has not been independently verified. Neither Imperial College London nor any of the authors of this report accepts any duty of care, responsibility or liability in relation to this report or its application or interpretation, including as to the accuracy, completeness or sufficiency of it or any outcomes arising from the same.

Please send comments and feedback to:

Email: leonardo.centre@imperial.ac.uk

About the Leonardo Centre

The Leonardo Centre on Business for Society is a cross-faculty Centre of Excellence at Imperial College London.

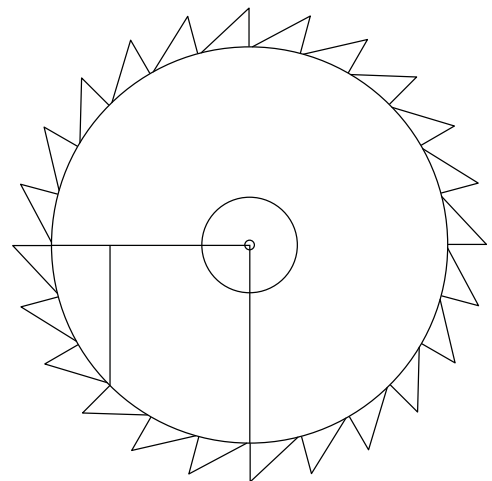
The Science of Business for Humanity

We work with leading scholars, purpose-driven companies, and global institutions to redraw business from basic principles for a flourishing economy and society.

We ask three fundamental questions:

- What model of business fits with humanity’s expectations on economic and social wellbeing within planetary boundaries?
- What are the transformational changes necessary in mindsets, business models and markets to realise an economic system fit for purpose?
- For each type of change, what are the progressive steps needed to propagate and establish these new models in business?

Leonardo is well positioned to tackle these questions by integrating unique data, real-world experimentation, and interdisciplinary co-innovation at global scale.



The Leonardo Centre on Business for Society

Imperial College Business School
South Kensington Campus
London SW7 2AZ
United Kingdom

Email: leonardo.centre@imperial.ac.uk

Website: [imperial.ac.uk/business-school/
leonardo-centre-business-society](https://imperial.ac.uk/business-school/leonardo-centre-business-society)

