

# Impact-driven alpha in Japan:

A behavioural revolution  
in corporate sustainability



In collaboration with

**NIKKEI**

## Executive summary

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## **Sustainability creates value in Japan—but only when it changes the business.**

Japanese companies that embed sustainability into innovation have consistently outperformed the market. Over the past twelve years, a portfolio of these companies generated 3.0% annualised alpha on a long-only basis and 4.7% alpha through a long-short strategy — statistically significant risk-adjusted returns under the Fama–French three-factor model.

## **Japan's sustainability transformation: From activity to value creation**

Japanese companies have transformed the scale of their sustainability activity. Between 2012 and 2023, the number of disclosed sustainability initiatives increased by 81%, reflecting more than a decade of governance reform and growing investor expectations. Sustainability has moved from the periphery to the centre of corporate and investment strategy.

**Yet activity is not value.** The central challenge for investors, companies, and policymakers is no longer whether Japanese companies are engaging with sustainability, but whether those actions change how businesses operate, compete, and create long-term value.

This report addresses this challenge through a behavioural approach that examines corporate sustainability actions directly, identifying which forms of sustainability activity are associated with profitability, valuation, growth, and shareholder returns.

## **A behavioural lens on corporate sustainability**

The analysis is powered by the **GOLDEN Sustainability Dataset**, a proprietary action-based database developed at the Leonardo Centre on Business for Society, Imperial Business School. The dataset captures more than 288,000 sustainability initiatives disclosed by 971 Japanese listed companies between fiscal years 2012 and 2024. Using advanced ML/NLP algorithms, each initiative is classified by its behavioural content, goals (SDGs), and stakeholder beneficiaries.

We apply the **Business Impact Maturity (BIM) framework** to sort every initiative into one of four behavioural buckets—i.e., Advocacy, Upskilling, Adaptation & Change, Innovation—along a spectrum from external signalling to systemic transformation (details in Section 1). Rather than measuring what companies say, the BIM framework measures how deeply sustainability is embedded in the way the business creates value. This behavioural perspective reveals a clear distinction between companies that communicate sustainability and those that use it to transform competitive performance.

# Key findings

## Maturity drives value creation.

- 1. Japanese companies are moving up the maturity curve.** Sustainability activity is gradually shifting from Advocacy (**42% to 36%**) towards Adaptation & Change (**30% to 38%**), reflecting deeper organisational integration of sustainability in Japan (see Section 2). However, Innovation still represents only around **5% of initiatives**—albeit above the global average (–3.9%)—highlighting a significant opportunity for Japanese companies to move from operational improvement towards sustainability-driven growth and value creation.
- 2. Innovation behaviour consistently creates value.** Companies embedding sustainability into products, technologies, and business models deliver stronger profitability, higher valuations, and faster growth over time. The High Innovation portfolio achieves a 0.59 Sharpe ratio, outperforming the market (0.38) without increasing downside risk. Companies in the top 15% for Innovation actions delivered **3.0% annualised alpha** on a long-only basis and **4.7% annualised alpha through a long-short strategy** (see Section 3.3 & 3.4).

- 3. Advocacy signals activity, not transformation.** Companies concentrated in outward-facing sustainability initiatives may demonstrate strong commitment and visibility, but these actions do not translate into shareholder value creation. High Advocacy companies experience higher revenue growth but lower profitability and weaker valuations, suggesting that communication without operational change is an insufficient pathway to competitive advantage (See Section 3.2).
- 4. Adaptation & Change pays off on the balance sheet, not in the share price.** Companies with higher Adaptation & Change intensity sustain durable profitability gains, but the market generates no significant abnormal return on the signal (See Section 3.2 & 3.4).

## Summary: Behavioural indicators and financial implications

|                                                                                                           | Advocacy                                                                                                                       | Upskilling                                                                                                                       | Adaptation & Change                                                                                                                    | Innovation                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>What it means</b>                                                                                      |  External signalling, no operational change |  Builds human capital and internal capability |  Embeds sustainability into operations & governance |  Creates novel solutions and builds competitive advantage |
| <b>Share of initiatives (FY2012 → FY2024)</b><br><small>Scale: 0–45% of all initiatives disclosed</small> | <b>42% → 36%</b>                                                                                                               | <b>23% → 21%</b>                                                                                                                 | <b>30% → 38%</b>                                                                                                                       | <b>Flat at ~5%</b>                                                                                                                             |
| <b>Link to fundamentals</b>                                                                               | Revenue growth, but negatively linked to margins                                                                               | No measurable effect on future profitability                                                                                     | Higher profitability, but not accelerating                                                                                             | Improving profitability, with rising valuation                                                                                                 |
| <b>Sharpe ratio</b><br><small>High portfolio vs. market (0.38)</small>                                    | Below market<br> -0.07                      | Close to market<br> +0.02                     | Close to market<br> -0.01                          | Above market, lower risk<br> +0.21                        |
| <b>Key message</b>                                                                                        | Visibility without value creation                                                                                              | Limited link to financial performance                                                                                            | Durable profit gains, but no market reward                                                                                             | Consistently creates value +3.0% long only / +4.7% long-short alpha                                                                            |

**Note:** This exhibit summarises the overall trends and key financial implications of the four BIM behavioural categories (Advocacy, Upskilling, Adaptation & Change, Innovation). It highlights the evolution of each category, including its share of initiatives from FY2012 to FY2024, its relationship with financial fundamentals, and the Sharpe ratio of its High portfolio relative to the market benchmark.

## Complementing conventional ESG ratings

Our analysis reveals that BIM indicators capture distinct attributes in addition to conventional ESG ratings:

- 1. ESG ratings primarily capture organisational capability and risk management.** Both MSCI and LSEG ESG scores are positively associated with Upskilling activities, such as employee training and stakeholder engagement.
- 2. Innovation represents a distinct behavioural signal.** Both ratings are negatively associated with Innovation, which is the behavioural category most strongly linked to superior profitability, higher valuations, and long-term stock performance.
- 3. Behavioural maturity captures the strategic dimension of sustainability.** While ESG ratings assess how well companies manage sustainability-related risks, the BIM framework reveals whether sustainability is creating competitive advantage.

Together, these findings suggest that behavioural analysis can complement existing ESG approaches. It captures a more nuanced approach to sustainability performance—whether sustainability is embedded as a source of business transformation and value creation.



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## Towards a behavioural revolution

**For companies.** Sustainable value creation depends not on additional disclosure, but on embedding sustainability into products, operations, governance, and innovation. Redirecting investment, management attention, and R&D towards these higher-maturity behaviours can strengthen both competitiveness and long-term performance. The Business Impact Maturity (BIM) framework provides boards with a practical diagnostic to measure progress through actions (Section 4.1).

**For investors.** Innovation intensity provides a scalable, rules-based alpha signal for sustainable investing, while Advocacy intensity serves as a robust negative screen. The Impact Finance Maturity Model (Section 4.2) translates these signals into practical applications across asset owners, asset managers, private equity investors, and banks—from portfolio construction to stewardship and engagement.

**For policymakers.** Japan has made significant progress in expanding sustainability disclosure. A remaining challenge is understanding how to distinguish transformational action from compliance-driven activity. Behavioural analysis offers a potential complementary lens, opening new avenues for research and future applications across disclosure, governance, and stewardship framework (Section 4.3).

The next phase of the sustainability journey extends beyond disclosure and risk management. It lies in understanding the behaviours that transform sustainability into competitive advantage and sustainable value. **In Japan, these behaviours are already visible—creating new opportunities for investors, companies, and policymakers to identify and accelerate long-term value creation.**

# IMPERIAL CONSULTANTS

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**For enquiries please contact**

**Leonardo Centre on Business for Society**  
Imperial Business School, South Kensington Campus  
London SW7 2AZ, United Kingdom

**E:** [leonardo.centre@imperial.ac.uk](mailto:leonardo.centre@imperial.ac.uk)

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

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