The Yieldrive Method

vol. 1

Actionable ESG data and tools for investors

Yieldrive

Connecting ESG and Financial Performance

The Yieldrive approach helps investors make qualified decisions about their ESG investments. In this, it connects ESG performance to financial results of companies.

Point by point, it identifies companies' past, present and future abilities to utilize ESG to generate value long term value for shareholders and stakeholders.
Yieldrive uses a deep dive bottom-up approach connecting a company's ESG processes (called "Yieldrivers") to its financial performance—ranging from revenues to company value and projected stock price.

A 2021 comprehensive study by New York University / Rockerfeller Asset Management covering 1,400 ESG papers and studies on ESG and financial performance reveals that,

- Time Matters – Improved financial performance due to ESG becomes more noticeable over longer time horizons.
- Investment Strategy Beats Negative Screening – ESG integration as an investment strategy performs better than negative screening approaches.
- Downside Protection – ESG investing provides downside protection, especially during a social or economic crisis.
- Leads to More Innovation & Risk Management – Sustainability initiatives at corporations appear to drive better financial performance due to mediating factors such as improved risk management and more innovation.
- Low-Carbon is Key – Managing for a low-carbon future improves financial performance.
- Strategy Matters – ESG disclosure without an accompanying strategy does not drive financial performance.

Yet, the high volume of diverse data and studies on ESG reveals the key problem of ESG investing: Particularly retail investors are confused and uncertain about how to value assets from an ESG standpoint.
Accordingly, Yieldrive provides several tools, such as filters for top performers, Yieldrive Fair Value, and the ESG Portfolio Adjuster, to reveal the ESG yield drivers of companies in a transparent manner.

Yieldrive

ESG, Human Processes and Contribution to Companies' Performances

Yieldrive is designed to help investors analyse the ESG value drivers that impact the financial performance of listed companies. Two fundamental Yieldrive principles are that,

- human processes are financial value drivers, "Yieldrivers", and
- they are slowest to change and thus a basis for predicting companies' future successes and failures if they can be quantified.

Human processes, such as training, corporate culture, communications, supply chains, etc., change more gradually than financials. Indeed, they are dictated by habit and behavioral inertia. Research shows that 40% of our daily activities are dictated by habit, (Duke Univ., 2020), and that it can take up to 245 days to form new habits (Science Alert, 2018).

A company with solid internal processes such as a performance culture, strong internal and external marketing, effective recruitment practices, among others, is likely to continue in its success at least for a while. On the other hand, a company with poor human indicators is not likely to perform well or recover quickly from periods of weak performance. Yieldrive quantifies these processes in the form of over 100 ESG indicators over a 10+ year period.

Universe of Sustainability Factors

Environment
- GHG emissions
- Air quality
- Energy management
- Water and wastewater management
- Waste and hazardous materials management
- Ecological impact
- Climate impact

Social Capital
- Community relations
- Human rights
- Access and affordability
- Customer welfare
- Data privacy & security
- Selling practices & product labeling
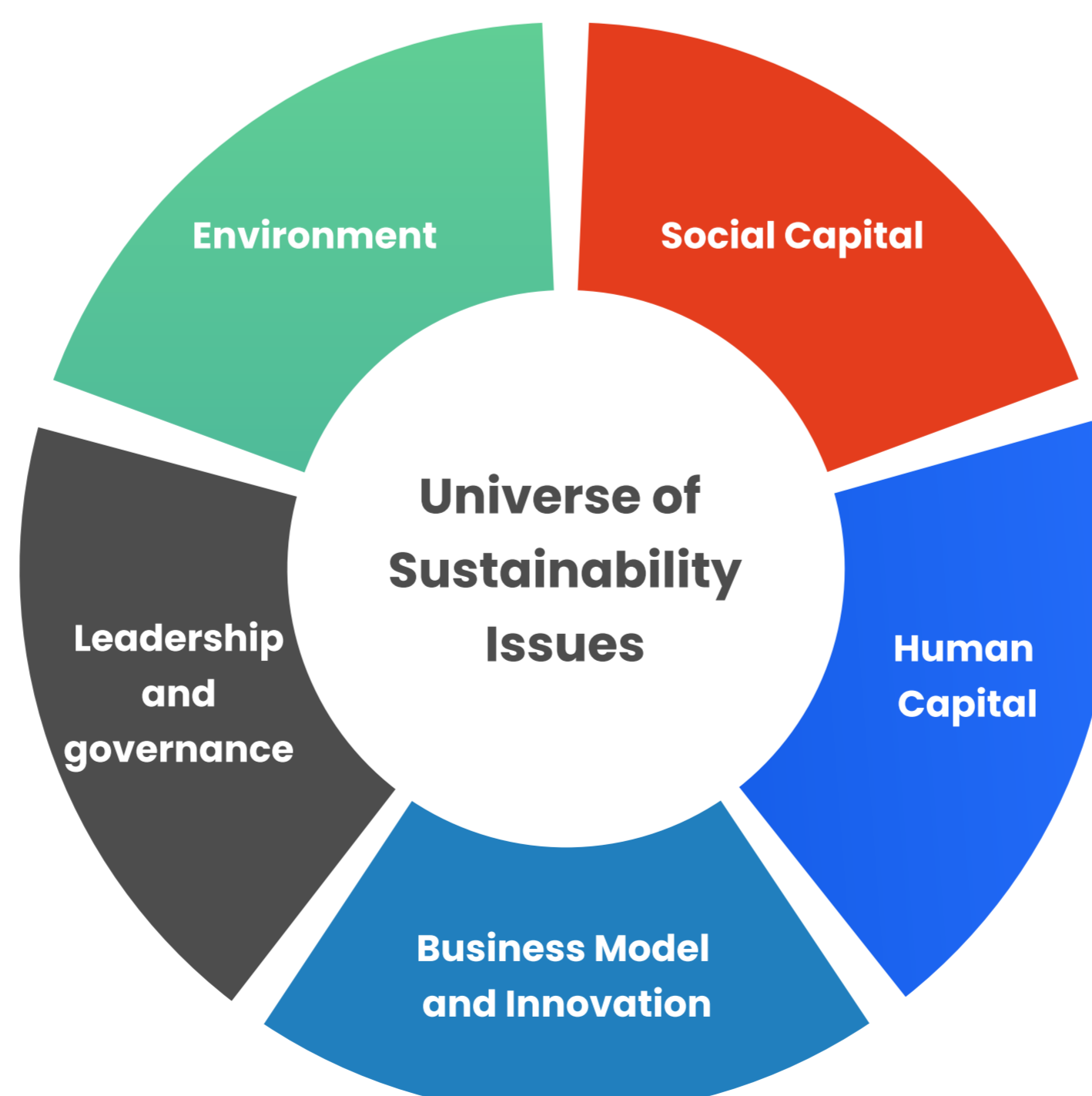
Human Capital
- Labor relations
- Labor practices & compensation
- Employee health, safety, and wellbeing
- Employee recruitment, engagement & diversity

Business Model and Innovation
- Product Design & lifecycle management
- Product packaging & distribution
- Product quality & safety
- Supply chain management
- Materials sourcing
- Investment, credit, & underwriting ESG risks
- Rate structure & pricing
- Business model resilience

Leadership and governance
- Business ethics
- Competitive behavior
- Management of legal & regulatory environment
- Critical incident risk management
- Systematic risk management

Yieldrive

Yieldrive ESG Indicators

The Yieldrive method builds on two separate groups of indicators and distinct corresponding calculations:

- Yieldrive ESG indicators
- Yieldrive financial indicators

ESG indicators track and assess the performance of ESG related human processes in companies and good management. On the other hand, the financial indicators reflect historic financial performance largely springing from good or bad processes.

The approach draws on the work of Dr. William Cox, whose theses at the London School of Economics and Oxford University focused on quantifying the impacts of human processes on financial performance of blue chip corporations and emerging markets sustainability performance indexes.

The result of combining these two indicator groups in a proprietary calculation reveals the impact of ESG on a company's financial performances and value.

Yieldrive ESG indicators draw on standards from reputable institutions, including,

As one of its core features, Yieldrive developed proprietary datapoints that impact operational resilience and enterprise value. Regulatory changes and news are updated daily, such as the EU Sustainable Finance Disclosure Regulation and ESG market insights, while also cross-referencing real-time updated data on assets exposed to it.

Yieldrive draws its 10+ years of data and news from reputable media, regulatory filings, annual reports, and research studies via an artificial intelligence natural language process. This process generates Relevance and Sentiment scores on a scale of -100 to +100 points for each piece of news and information.

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Yieldrive Financial Indicators

Yieldrive's 23 financial ratios are focused on assessing companies' abilities to generate resilient value for shareholders and stakeholders. They are a Yieldrive proprietary group of indicators designed to corner key aspects of companies' operating effectiveness and ability to generate value over time.

Yieldrive expands the number and reach of ratios and indicators from 9 to 23.

- Cash Flow and Profitability
- Capital structure
- Operating efficiency

Yieldrive also uses a binary scoring for each indicator, allocating 1 point for a positive development per quarter and 0 points for a negative development. The Yieldrive total financial score is derived from these point allocations.

In a final step, Yieldrive merges both ESG and Financial scores into a proprietary Yieldrive calculation including Financial Indicator scores to generate several scores:

- Total ESG Score
- Environmental score
- Social Score
- Governance Score
- Financial Score

Yieldrive

Yieldrive Fair Value

To help investors analyse the ESG contribution to financial performances of companies, Yieldrive developed a proprietary calculation called Yieldrive Fair Value.

It is Yieldrive's estimation of companies' fair value in 12 months considering ESG and financial performances as well as companies' transparency. Yieldrive does this by recalculating companies' Cost of Equity (COE) considering ESG impacts. The result is a higher or lower risk which is then applied to analysts' consensus of the stock price in 12 months.

If ESG has a positive impact on COE (reducing the COE), the median stock price projected by analysts is adjusted upwards. If ESG has a negative impact (raising the COE), this projection will be corrected downwards. Companies not accordingly covered by analysts, cannot be assigned a Yieldrive Fair Value.

Portfolio Adjuster

Yieldrive´s Portfolio Adjuster - adjusts the weightings of portfolio components according to their current ESG performances. Companies with stronger ESG performances automatically are weighted higher and thus have a greater impact on portfolio performance.

The result is that a portfolio is driven by companies with stronger performances which therefore performs better as a whole.

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Human Capital
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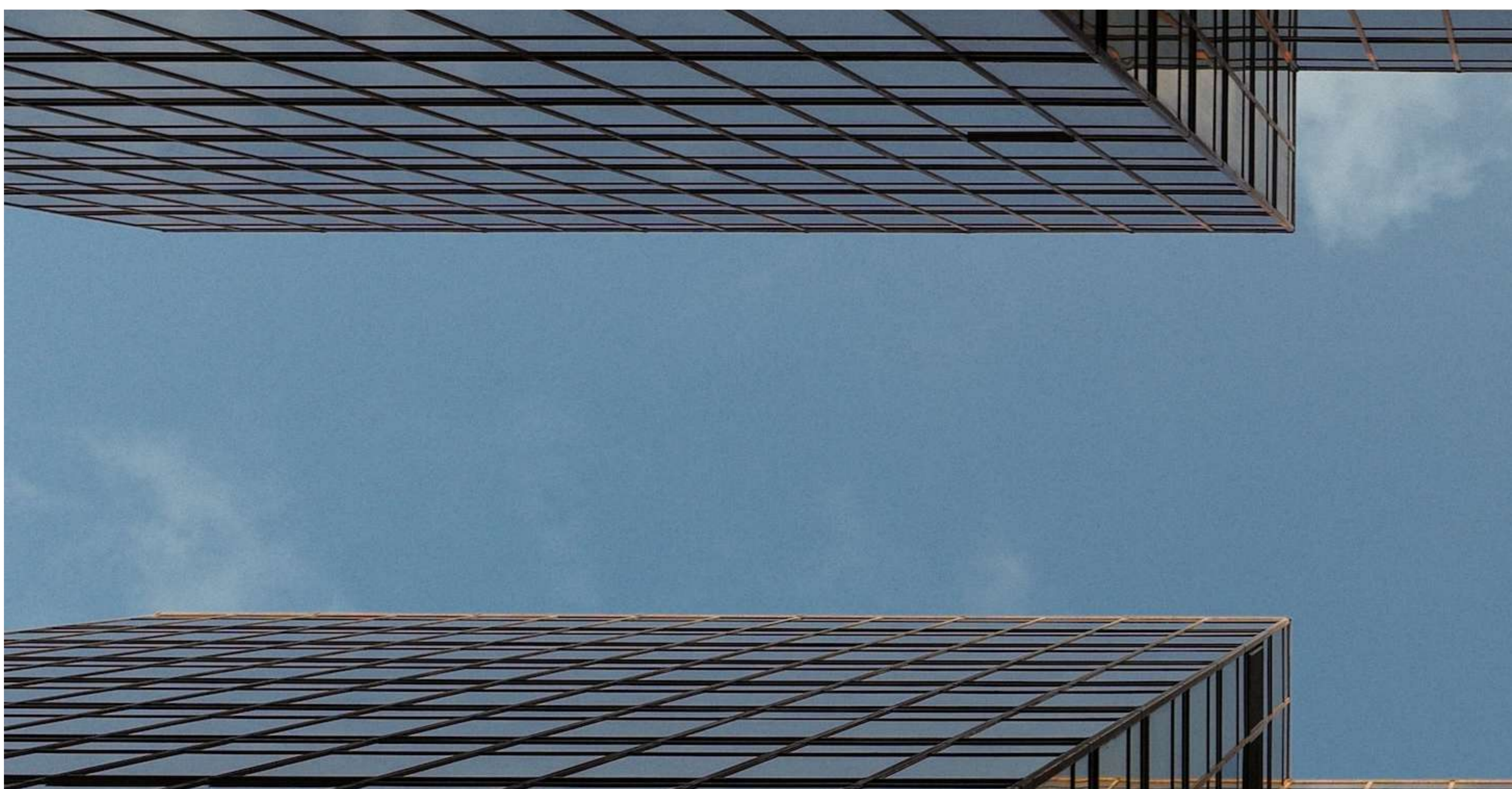- Employee recruitment, engagement & diversity

Business Model and Innovation
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Environment · Social Capital · Human Capital · Business Model and Innovation · Leadership and governance

Universe of Sustainability Issues

Yieldrive
Quality & Actionable Data

Using its deep dive approach, Yieldrive translates over 500 billion data points, documents and news from numerous sources into actionable data for investors, and the platform's ability keeps growing as the AI engine exponentially expands its learning power and more data is made available.

The result is that ESG resilience is expressed in financial terms which makes it easy for investors to compare companies and select the strongest ones.

> *While the environmental aspect of ESG can be fairly straightforwardly quantified, the social and governance parts of ESG are more difficult.*
>
> (John Authers, Chief Markets Editor at Bloomberg, 12 June, 22).

To break this historic data impasse, Yieldrive uses a natural language processing (NLP) technology to collect and quantify data on ESG-related human processes. This is an artificial intelligence driven technology which extracts data and news for each of our ESG indicators, valuing it in real time according to its relevance and sentiment. The results tend to strongly reflect market sentiment and factual content.

Yieldrive sources on ESG relevant human processes using NLP include,

- Regulatory filings, such as to the SEC
- Financial data platforms
- Company annual reports
- News from wire services
- Published news
- Research reports

Financial data and ratios are drawn via API from Financial Modelling Prep.
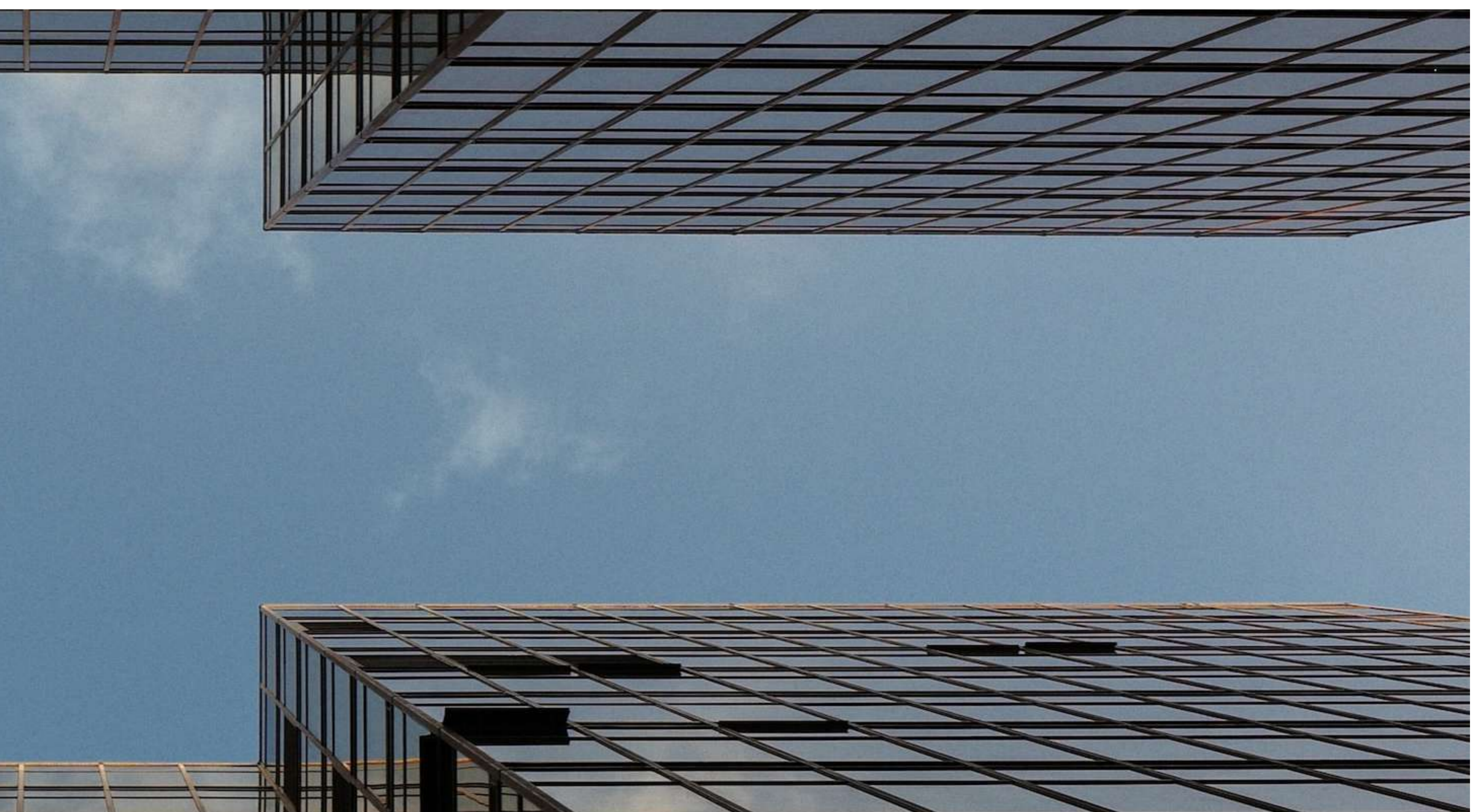
Yieldrive

The Yieldrive Method counters four fundamental shortcomings of most ESG approaches analyzing corporate resilience: +

• connecting ESG and financial strength;
• helping identify the ESG contribution to financial performance;
• resolving the muddle over which set of ESG standards to use;
• upgrading ESG from data in dusty, outdated reports to powerful real-time actionable data.

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