

OWL's ESG Consensus Scores integrate and optimize the largest ESG dataset in the industry, providing robust, unbiased, timely scores for *25,000+ public companies* worldwide.



ALL INVESTMENTS HAVE AN IMPACT.





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Environmental, Social and Governance ("ESG" or "Sustainability") is no longer a peripheral issue embraced by an outlier segment of the investment community – it is undeniably in the mainstream, cutting across the global asset management landscape. ESG ratings providers attempt to synthesize a wide range of disparate data from various sources into actionable tools for use in evaluating and comparing companies' sustainability practices.

Although sometimes seen as a judgment of a company's ethical behaviors, ESG ratings are actually an assessment of how well a company is managing the risks and opportunities associated with environmental, social and governance issues. In other words, ESG is a risk management topic that confronts all investors, as all investment strategies are exposed to ESG-related risks. ESG ratings provide information and insights to help investors recognize and manage their exposures to those risks.

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DATA USED BY FIRM 1 TO RATE COMPANY ABC **OVERLAP DATA USED BY FIRM 2** TO RATE COMPANY ABC **TWO FIRMS RATING** THE SAME COMPANY RESEARCH FIRM 1 **RESEARCH FIRM 2**

THE PROBLEMS WITH TYPICAL ESG RATINGS

The world of ESG data can be described as *subjective*, *non-standard*, *self-reported*, *and unregulated*. Attempts to standardize and mandate reporting over time, and to define materiality with respect to sustainability practices have met with little success. Thus, extreme inconsistency is the norm.

Given that ESG data suffers from these problems, each ESG ratings firm is forced to make significant decisions about which data sources to use, how to combine the data into factors, and how to weight the factors to rate a company's sustainability practices. By doing so, each one must make its own ethical judgments about what matters most, for a given industry and within the individual E, S, and G categories.

We cannot expect the various ESG ratings providers to be at all consistent in their data sources, factors or weightings, or to make the same ethical judgment calls. Therefore, we cannot expect consistency across ratings.

This is the reason a company can receive high, medium and low scores across different rating firms – embedded in each firm's ratings are its particular views about which E, S and G issues are most relevant or meaningful, and how each rating firm chooses to address the wide

disparities in ESG disclosures. *Therefore, by* selecting any single provider's ratings, end-users are relying on only opinion among many.

To be clear, individual ESG research agencies provide a valuable service; the problems in using their ratings are symptoms of the challenges they face in collecting and integrating data, and making numerous, subjective choices. Unfortunately, this creates significant problems for asset managers, investment advisors, hedge funds, pension plans, and others wishing to use ESG scores to design investment strategies, manage portfolios, and satisfy their clients' preferences.

OWL Analytics' consensus-based approach solves this problem by eliminating the need to adopt any individual ESG ratings provider's particular point of view.



OWL'S "WISDOM OF THE CROWD" APPROACH

OWL's ESG Consensus Scores are derived from *hundreds of inputs* across *numerous sources* that represent a *wide range of perspectives*. Our Consensus Scores use a "wisdom of the crowd" approach, leveraging the world's leading ESG data and research firms' insights.

OWL analyzes each provider's ratings to determine which metrics it has chosen as most relevant for a given industry in determining its ESG ratings. From this, we construct a broad-based, unbiased view of the relevance of various E, S and G metrics for each industry. **In other words, our Consensus**Scores are precisely that, a consensus constructed from "wisdom of the crowd" insights.

CATEGORY	EVERYONE ELSE	OWL	WISDOM OF THE CROWDS			
Data	Less Data	More Data	More ESG Data at the Company Level			
Viewpoint	Single Viewpoint	Consensus Viewpoint	Collective Intellegence that Evolces Over Time			
Process	Subjective Analysis	Objective Optimization	Statistical Optimization reduces Subjectivity & Error			
Frequency	Yearly	Monthly	More Actionable ESG Scores & Metrics			
Coverage	Less Coverage	More Coverage	Better Integration with Risk Models, Superior Index Coverage			





Consensus scores are built on four pillars: *Earth* ("Environmental"), *Employer, Citizenship* (two aspects of "Social"), and *Governance*. Each pillar has its own consensus score, and all four are combined into an overall ESG score.

The Earth, Employer, Citizenship and Governance pillars are built from a total of 12 ESG-based Key Performance Indicators (three per pillar). These KPIs are constructed from 100+ metrics related to ESG behaviors and financial performance. The KPIs, which capture the ratings and metrics on the relevant ESG factors from each of our underlying sources, are:

E		S			G		
	Environmental		Employer		Citizenship		Governance
E1	Pollution Prevention	EMP1	Compensation & Satisfaction	CIT1	Community & Charity	G1	Board Effectiveness
E2	Environmental Transparency	EMP2	Diversity & Rights	CIT2	Human Rights	G2	Management Ethics
E3	Resource Efficiency	ЕМР3	Education & Work Conditions	CIT3	Sustainability Integration	G3	Disclosure & Accountability





COMBINING INPUTS AND INSIGHTS

A hybrid of human intelligence and technology -

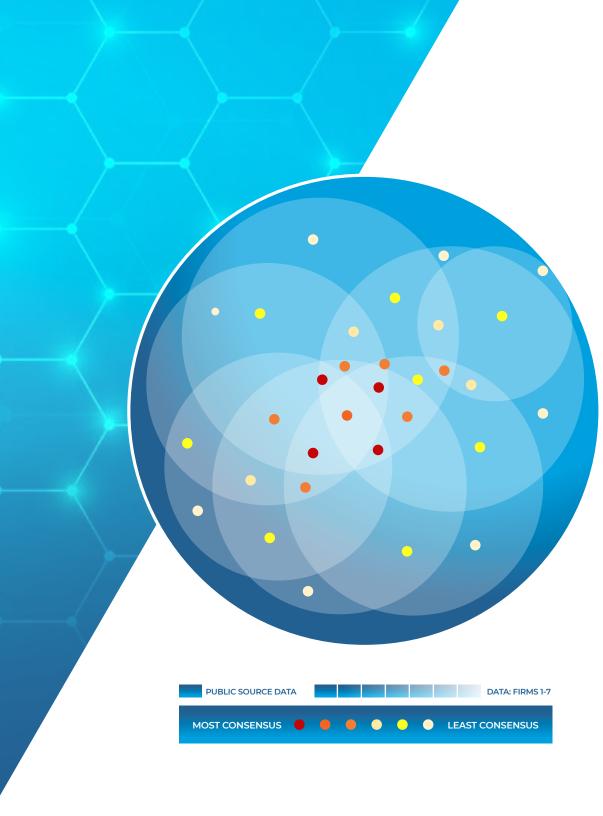
Some ESG research providers use teams of analysts to comb through company information; others take a technology-driven approach using machine learning and natural language processing. By combining inputs across a wide swath of sources, OWL's unique ESG Consensus Scores are a hybrid of intelligently combined analyst- and technology-driven inputs.

For each industry, we identify every factor that at least one of our contributors has identified as relevant, cleaning the data to reconcile inputs across providers (often, the same ESG factor is called by a different name). We assign heavier weights to metrics that are used most often by the largest number of contributors, and vice versa.

We also measure the relationship between the KPIs and future financial performance within regional peer groups defined by industry, sector and sub-sector. Based on this, we construct a unique set of alternative weightings that emphasize the KPIs that are most strongly associated with financial outperformance within a peer group.

Both the standard and financial performance-based weighting schemes produce scores for the four pillars and overall ESG that range from 0-100. We also provide ranks and percentiles by industry, sector, and sub-sector.

Please contact us for more details on our Methodology.

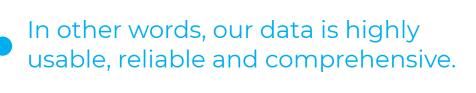




USABLE DATA FROM A WIDE RANGE OF SOURCES

OWL's Consensus Scores transform disparate pieces of information into actionable insights. By aggregating and synthesizing a wide range of inputs across a variety of sources, we create highly usable data that:

- Reflects the most wide-ranging set of ESG inputs in the industry, providing exceptional coverage worldwide,
- Is updated monthly, rather than quarterly or once a year, as is the case for most providers,
- Includes peer rankings and percentiles across regions, sectors, sub-sectors and industries,
- Covers the highest number of securities and the widest range of indexes worldwide, allowing investors to build strategies with confidence.
- Allows for easy comparisons between individual companies and their logical peers,
- Provides the best coverage of small-cap, emerging market, and frontier market equities





USABLE DATA SOURCES (CONT.)

OWL ESG consumes over 100 million data elements from over 500 sources, including ESG research firms, news and media outlets, Non-Governmental Organizations (NGOs), government databases, unions and activist groups, and more, to produce our KPIs. We categorize them here:

Generalist ESG Research Providers

Conduct extensive fundamental research to gather, synthesize, and analyze E, S and G data, then aggregate the data to create scores and metrics to assess a company's ESG performance relative to its peers.

Controversy ESG Research Providers

Use news and other media sources to identify and assess the severity of ESG-related controversies for a given company. Many generalist firms also provide controversydriven research.

Specialist ESG Research Providers

Similar to generalists in approach, but focused exclusively on either environmental, social, or governance ESG data and metrics.

Public Sources

A diverse group that includes research-driven entities such as the Carbon Disclosure Project, for-profit providers like Glass Door, government sources including the Environmental Protection Agency, and published responses to questionnaires from international organizations such as the UN Global Reporting Initiative.

Sustainability determines the future stability and livability of our world; therefore, it affects every investor. OWL Analytics' ESG Consensus Scores allows investors, asset managers and advisors, to evaluate a company's ESG practices, which affect the risks and opportunities directly impact the company's future. The consensus approach objectively combines the best ESG data and research available today.



ABOUT US

Founded in 2012, OWL Analytics & Investment Research is focused on providing a comprehensive suite of data, metrics and tools for evaluating sustainability and applying environmental, social, and governance metrics to the global investment arena.

We want our work to have a positive impact, whether by helping investors to make more informed, impactful decisions with their money using our data, or by powering index-based products that allocate the lion's share of investment dollars to good corporate citizens.

Leading financial institutions that are entrusted with managing billions of dollars for investors across the world turn to OWL for our diverse range of ESG products and customized solutions, to help them meet sustainability mandates that continue to expand and evolve.

OUR MISSION

To raise the standard of ESG data

Our mission is to provide data, indexes, evaluation metrics and other tools that allow investors to make informed choices while helping the planet. This mission is not an afterthought; it's at the core of everything we do.

The individuals on the OWL Analytics team come from diverse backgrounds with a heavy emphasis on quantitative investing, the sciences, and mathematics. We all share a passion for discovering powerful alternative approaches to synthesizing data, improving its usability and applying insights from the data to improve investment performance while making the world a better place.

Contact Us

OWL Analytics & Investment Research offers a comprehensive suite of data, metrics, screening and indexing tools focused on the environmental, social, and governance (ESG) characteristics of equities and equity funds worldwide.

OWL Analytics 312 Arizona Avenue Santa Monica CA 90401 +1.424.800.3834 info@owlshares.com



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