

Measuring Corporate SDG Alignment

FactSet launches real-time
SDG Monitor free to the public

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Has Lack of Data Hindered Adoption of the UN Sustainable Development Goals?

According to the Truvalue Labs™ ESG Investor Forum 2020 poll, 28% of respondents said their investment framework was currently aligned to the UN Sustainable Development Goals (SDG) while 42% said they have plans to align. Furthermore, 72% of respondents said social factors are the most difficult to analyze and integrate, with environmental ones next at 18%. These responses indicate that one of the keys to wider SDG adoption is access to better data for both the social and environmental pillars. Moreover, as highlighted in our [introductory SDG brief published in November](#), [PwC reports](#) only 1% of the firms in their sample measured and reported quantitative performance against SDG targets¹.

To address the data challenge and accelerate industry adoption of the UN SDG's, Truvalue applied its award-winning technology to build a [data service](#) around the SDG framework and has launched the [FactSet SDG Monitor](#). Both the data service and the SDG Monitor are powered by artificial intelligence to measure companies positive and negative SDG alignment in near real time from more than 100,000 sources in 13 languages. The focus of this research brief is around measuring corporate alignment specifically. Along with company actions, it will also take actions by governments and NGOs to fulfill the SDG objectives by 2030.

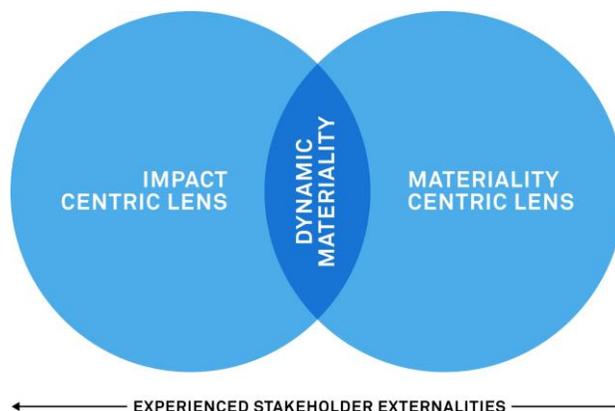
The SDGs were originally formulated for countries and official agencies. It subsequently became clear that the private sector is critical to both finance and achieving the SDG Goals. However, the private sector has struggled to translate the high-level goals into operational objectives. Our process utilizes the joint [UN Global Compact](#) and [GRI Business Reporting on the SDGs: An Analysis of the Goals and Targets](#) report as guidance on how to measure corporate alignment. Moreover, it is worth noting that the [EU Green Deal](#) and [EU Action Plan](#) reference the SDGs, along with the [Paris Agreement](#), as the core catalysts to achieve the UN's 2030 Agenda. In other words, the SDGs are laying the foundation for the future direction of sustainability, and therefore relevant to both corporations and investors.

Including Impact alongside Materiality Analysis

Prior to ESG going mainstream in the last couple of years, it was harder to get buy-in from asset managers and owners to incorporate ESG into the investment process. Therefore, materiality became the lead talking point for ESG because any fiduciary in the world would be required to incorporate it to fulfill their legal obligations. For additional details on ESG Materiality, please refer to the [ESG Materiality Factors in the Fourth Industrial Revolution](#) white paper.

The next logical evolution in the financial industry is to focus on the full suite of experienced stakeholder externalities, both from an impact and a materiality lens. For the purposes of this brief, an impact lens refers to the SDG goals and materiality lens refers to the Sustainable Accounting Standards Board (SASB) Materiality Framework. Two vantage points – Impact (SDG) and Materiality (SASB) – overlap and can change as new issues emerge or erupt over time as we saw with corporate responses to the COVID-19 pandemic. Looking at both allows for a more holistic sustainability assessment. The Venn diagram below makes it easier to visualize the relationship between impact and materiality.

Impact/SDGs measure outcomes vs. Materiality/ESG being an active risk measure



A Unique Holistic Approach to Measuring Impact

FactSet is uniquely able to provide this outside-in stakeholder lens via Truvalue data alongside corporate disclosed revenue information via [RBICS](#), for a holistic SDG assessment. In certain cases, a corporate revenue lens might not be a good proxy for experienced stakeholder externalities. For example, a clean energy car company that has a history of poor labor practices will be evaluated not just on the goal of clean energy, which generates revenue, but also on the goal of decent work, which does not. This is an important difference and illustrates why having both perspectives are essential. For now, the [SDG Monitor](#) will focus on the outside-in stakeholder lens, and we will consider the revenue lens in the future.

Measuring Corporate Impact Signatures via Dynamic ImpactSM

Analogous to how corporations have unique Materiality Signatures as evidenced in the ESG Materiality Factors in the Fourth Industrial Revolution white paper, we find that corporations analogously have unique Impact Signatures which change through time. This is what we deem as Dynamic ImpactSM, which captures the notion that certain impact metrics (SDG Goals) can change in relative importance to stakeholders over time due to changing industry trends, regulation, cultural norms, and physical climate characteristics.

In the below matrix, we measure Impact Signatures across global regions using a Levenshtein Distance¹ algorithm. This aggregates the Truvalue Volume metric by region and sorts by UN SDG category volume. The key takeaway is that global countries and regions have unique Impact Signatures as determined by stakeholders, and therefore require technology and appropriate multi-dimensional modelling to capture this important nuance.

The higher the Levenshtein Distance score the more dissimilar the Impact Signatures, and the lower the score the more similar.

For example, the US and Europe have relatively dissimilar Impact Signatures with a Levenshtein Distance score of 13.

Whereas Europe and Japan's are more similar with a Levenshtein Distance score of 7.

Please refer to Appendix 1 for more details.

SDGs: Non-Polarized Levenshtein Distance by Region (6/30/2020)												
Region	US	Europe	Canada	Japan	Australia	Asia ex-Japan	China	Latin America	Emerging Asia	Developed Asia	EM	DM
US		13	12	13	10	12	9	12	10	9	10	10
Europe	13		12	7	10	10	9	11	8	10	9	14
Canada	12	12		12	9	9	12	13	12	12	12	14
Japan	13	7	12		11	10	11	12	10	10	9	14
Australia	10	10	9	11		9	8	12	10	10	12	12
Asia ex-Japan	12	10	9	10	9		10	11	8	10	11	11
China	9	9	12	11	8	10		8	8	10	10	10
Latin America	12	11	13	12	12	11	8		11	11	10	14
Emerging Asia	10	8	12	10	10	8	8	11		8	10	13
Developed Asia	9	10	12	10	10	10	10	11	8		11	13
EM	10	9	12	9	12	11	10	10	10	11		11
DM	10	14	14	14	12	11	10	14	13	13	11	

Source: Truvalue Labs [ESG Materiality Factors in the Fourth Industrial Revolution](#) White Paper

¹ The Levenshtein Distance, also referred to as the Edit Distance, between two sequences is the minimum number of single-element edits (insertions, deletions or substitutions) required to change one sequence into the other. It is named after the Soviet mathematician Vladimir Levenshtein, who considered this distance in 1965. Note: given this construct of high order dependence, the metric is, by design, highly sensitive to small changes in ordering, resulting in readings that can run high even for sequences with some degree of commonality or similarity.

It is evident that Goal 13: Climate Action and Goal 7: Affordable & Clean Energy are bigger focuses for European corporations from the charts above. This is not surprising with the Paris Accord and the European Green Deal being led out of Europe. As evidenced in the [Automakers SDG brief published in December](#), SDG goal alignment can vary by industries across regions. Industry alignment by region is a future area we will consider for the SDG Monitor.

Introducing Truvalue SDG Spotlights

The [SDG Monitor](#) additionally leverages the Truvalue Spotlight Events™ technology, which detects in near real time the most salient positive and negative SDG events. This provides investors the ability to quickly look at actual real-world events that are SDG-relevant.

In the example on the right there was a spotlight generated on March 2, 2021 from Costco, which raised the minimum wage for its US employees. This positive event demonstrates why measuring both positive and negative behavior is necessary for a holistic picture of corporate behavior and alignment.

TRUVALUE SDG SPOTLIGHT EVENTS™

Costco raises its minimum wage to \$16 an hour

- Feb. 25 (UPI) -- Costco will raise its hourly minimum wage to \$16 for U.S. employees amid ongoing debate among lawmakers on raising federal hourly minimum wage to \$15.
- Walmart, which has an \$11 minimum wage, announced last week it would raise its minimum wage for 425,000 store associates working in frontline roles to \$13 an hour.
- Biden has pushed to raise the federal minimum wage for all workers, which has been \$7.25 since 2009, and has already raised the federal worker minimum wage to \$15 by executive order.
- Individually, many states and cities have raised their minimum wages over the past few years amid grassroots advocacy by groups such as One Fair Wage and the Poor People's Campaign.
- Earlier this month, the Congressional Budget Office said raising the minimum wage to \$15 an hour would boost wages for some 17 million people and raise 900,000 U.S. workers out of poverty, but cost the United States 1.4 million jobs by 2025.

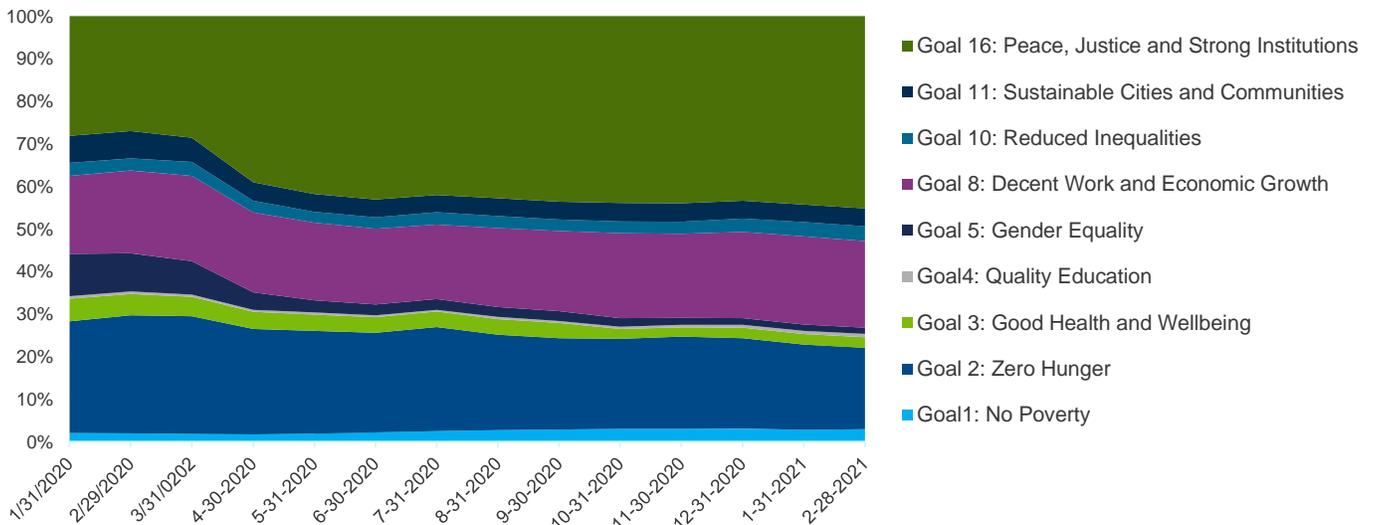
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● Goal 10: Reduced Inequalities
 Costco raises its minimum wage to \$16 an hour
 Source: [FactSet SDG Monitor](#), Data as-of March 4th, 2021

The Amplification of ‘S’ during the Covid-19 Crisis

As shown by the [Truvalue Coronavirus Monitor](#), it is evident when looking at SDG Goals during the Covid-19 pandemic that stakeholder attention increased for social and human capital-relevant goals. Stakeholder attention increased for the following SDG Goals from 1/31/2020 to 2/28/2021: Goal 1 (No Poverty), Goal 4 (Quality Education), Goal 8 (Decent Work and Economic Growth), Goal 10 (Reduced Inequalities), and Goal 16 (Peace, Justice, and Strong Institutions).

Social and Human Capital Relevant SDGs Volume during Covid-19 on the Global Solactive SGMLCUT Index

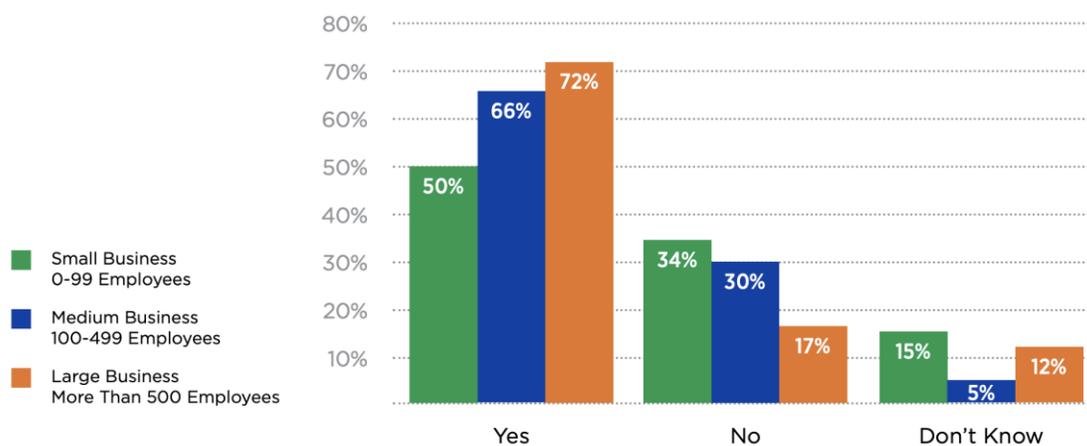


Source: Truvalue Labs and Solactive GBS Global Markets Large & Mid Cap Index, Data as-of March 4th, 2021

Accounting Practices and Corporate Disclosure Trends

In the [CPAs and the New Social Contract: The Rise of the Warrior Accountant report](#), CPA Ontario conducted a survey of their members who overwhelmingly responded that corporates should report on measures beyond financial information and shareholder return. While still a nascent trend, several factors point towards a future where sustainability information will become more abundant than it is today, including updated training of a new generation of accountants, increased regulations, and improved technology.

Do you think CPAs should be considering/ reporting on measures beyond financial information and shareholder return?



Source: CPA Ontario

Will Impact and ESG Investing become Synonymous in the Future?

Just as ESG has gone mainstream in the last couple years, impact investing is on the same trajectory to become axiomatic in the industry. To address the lack of data challenge, FactSet launched the [SDG Monitor](#) and [SDG Data Service](#) to help fill this gap. The EU regulatory frameworks being put into place from the EU Green Deal and Action Plan will further accelerate adoption and increase the availability of sustainability information. The growing influence of impact investors, following in the footsteps of ESG, can help make the 2030 UN SDGs a reality.

Appendix 1: Impact Signatures for the United States, Europe, and Japan

The United States and Europe share four of the top five categories, the ordering is notably different. Climate Action is the number one Sustainable Development Goal in Europe, and number three in the US. This aligns with Europe's environmental commitments embodied in the Paris Agreement, Green Deal, and Action Plan.

SDGs Top 5 Overlap (6/30/2020)			
United States		Europe	
Sustainable Development Goal	Dynamic Impact	Sustainable Development Goal	Dynamic Impact
Goal16 (Peace, Justice and Strong Institutions)	27.90%	Goal 13 (Climate Action)	21.90%
Goal 8 (Decent Work and Economic Growth)	19.46%	Goal 8 (Decent Work and Economic Growth)	15.93%
Goal 13 (Climate Action)	9.93%	Goal 16 (Peace, Justice and Strong Institutions)	15.78%
Goal 3 (Good Health and Wellbeing)	7.81%	Goal 7 (Affordable and Clean Energy)	14.28%
Goal 7 (Affordable and Clean Energy)	6.55%	Goal 12 (Responsible Consumption and Production)	7.43%

We observe a high degree of correlation between Europe and Japan, as the top four SDGs are ordered exactly the same based on their Dynamic Impact volume.

SDGs Top 5 Overlap (6/30/2020)			
Europe		Japan	
Sustainable Development Goal	Dynamic Impact	Sustainable Development Goal	Dynamic Impact
Goal 13 (Climate Action)	21.90%	Goal 13 (Climate Action)	26.57%
Goal 8 (Decent Work and Economic Growth)	15.93%	Goal 8 (Decent Work and Economic Growth)	15.00%
Goal16 (Peace, Justice and Strong Institutions)	15.78%	Goal16 (Peace, Justice and Strong Institutions)	13.74%
Goal 7 (Affordable and Clean Energy)	14.28%	Goal 7 (Affordable and Clean Energy)	12.40%
Goal 12 (Responsible Consumption and Production)	7.43%	Goal 3 (Good Health and Wellbeing)	8.45%

Appendix 2: Sustainable Development Goals Overview and Specific Company Topics Captured for each Goal

Sustainable Development Goals (SDGs)	Goal-Overview	Examples Sustainable of company-relevant topics
Goal 1: No Poverty	End poverty in all its forms everywhere	<ul style="list-style-type: none"> Financial services access and affordability Underserved groups Unethical pricing
Goal 2: Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	<ul style="list-style-type: none"> Sustainable agricultural practices Agricultural ingredients sourcing and certifications Food safety concerns Healthy and special diet foods Animal welfare
Goal 3: Good Health and Well-being	Ensure healthy lives and promote well-being for all at all ages	<ul style="list-style-type: none"> Harmful chemicals in products Drug and medical device safety Product recalls Addictive product use Healthcare access and affordability
Goal 4: Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	<ul style="list-style-type: none"> Mentorship and training Education company quality Education company ethics
Goal 5: Gender Equality	Achieve gender equality and empower all women and girls	<ul style="list-style-type: none"> Board diversity Gender discrimination Sexual harassment
Goal 6: Clean Water and Sanitation	Ensure availability and sustainable management of water and sanitation for all	<ul style="list-style-type: none"> Water pollution Water recycling and stewardship Water infrastructure
Goal 7: Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	<ul style="list-style-type: none"> Green buildings Renewable energy Unethical utility pricing
Goal 8: Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	<ul style="list-style-type: none"> Job creation Labor exploitation Employee health and safety Workplace happiness and turnover Supplier transparency and engagement
Goal 9: Industry, Innovation and Infrastructure	Build resilient infrastructure promote inclusive and sustainable industrialization and foster innovation	<ul style="list-style-type: none"> Digital divide ESG integration in financial products and services Engineering structural integrity
Goal 10: Reduce Inequalities	Reduce inequality within and among countries	<ul style="list-style-type: none"> Responsible lending Worker discrimination CEO pay gap Worker pay gap Workplace diversity and inclusion

Goal 11: Sustainable Cities and Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	<ul style="list-style-type: none"> • Air pollution • Environmental justice • Human rights policy and violations • Affordable housing • Safety management
Goal 12: Responsible Consumption and Production	Ensure sustainable consumption and production patterns	<ul style="list-style-type: none"> • Sustainability reporting • Circular economy • Specialized and hazardous waste management • Waste reduction • Palm oil sourcing
Goal 13: Climate Action	Take urgent action to combat climate change and its impacts	<ul style="list-style-type: none"> • GHG emissions • Sustainable transportation • Physical climate impacts
Goal 14: Life Below Water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	<ul style="list-style-type: none"> • Impacts on water-related endangered species and habitats • Oil spills Seafood sourcing
Goal 15: Life On Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	<ul style="list-style-type: none"> • Impacts on land-related endangered species and habitats • Sustainable forestry practices and certifications • Project lifecycle environmental impacts
Goal 16: Peace, Justice and Strong Institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	<ul style="list-style-type: none"> • Tax avoidance • Anti-competitive behavior • Cyber attacks and data security • Corruption ESG shareholder resolutions
Goal 17: Partnerships for the Goals	Strengthen the means of implementation and revitalize the global partnership for sustainable development	<ul style="list-style-type: none"> • No company issues mapped to Goal 17

Appendix 3: Truvalue Labs Scores Definitions

Term	Definition
Pulse Score	Truvalue Pulse Score reflects the short-term performance of a company as it focuses on the events of the day. The score is based on 0-100 scale, where 50 represents neutral and scores above 50 indicate positive performance, and scores below 50 reflect negative performance.
Insight Score	Truvalue Insight Score reflects the long-term performance of a company. It is derived from the Pulse score using an exponentially weighted moving average with a 6-month half-life. The score is based on 0-100 scale, where 50 represents neutral and scores above 50 indicate positive performance, and scores below reflect negative performance.
Momentum Score	Momentum Score measures the trend of a company. It is derived from the Insight Score, measures the slope or trajectory of the Insight over a trailing 12-month (TTM) time period.
Volume	Volume measures the number of unique articles, as well as the number of categories scored per day and over a trailing 12-month (TTM) time period.

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