

WHITE PAPER

A VALUE MODEL
FOR RESPONSIBLE
BUSINESS

MARCH 16, 2022

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Japanese Translation by Rie Nagatani

Special Thanks:

The research outlined in this report would not have been possible without the support of Doshisha University, Doshisha Business School, Masato Yamazaki, Kumar Iyer, Yong Yin, Fukuko Inoue, Katsutoshi Oki, Toshiro Kodama and all of the advisors and supporters of The Value Research Center.

The research outlined in this report was funded by the Doshisha University COVID-19 special research grant, and the Doshisha University Ministry of Education KAKEN-HI preparation research grant.

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EXECUTIVE SUMMARY

From July 2021 to February 2022 the research team at Doshisha University's Value Research Center integrated an additional 346 impact measurements from six new ESG and sustainability reporting frameworks into its existing Value Model it had previously developed in June 2020. These new frameworks included the International Sustainability Standards Board (ISSB)'s Prototype Climate-related Disclosures, the Stockholm Resilience Center's Planetary Boundaries, The International Finance Corporation's (IFC) Performance Standards, the UNDP's SDG Impact Standards for Enterprises, the Science Based Target's climate disclosures, and the Task Force on Climate-related Financial Disclosures (TCFD) guidance on metrics, targets, and transition plans.

Even by nearly doubling the number of impact measurements, the original 7 stakeholder, 27 theme, 80 goal model remained nearly unchanged. However, due to the increased focus on the use of palm oil, and its negative impacts on the environment and society, one additional goal "zero palm oil use" was added to the existing "biodiversity" theme within the nature stakeholder category bringing our total Goal count to 81.

The following white paper outlines:

- The foundational thinking that has guided our research to date,
- The process that we have followed to conduct our research, and
- The results of our most recent research efforts.

In this phase of our research, we have added more detailed assessment of the individual sustainability reporting frameworks in terms of their coverage and reliability as value measurement models.

THE PURPOSE OF A BUSINESS REVISITED

In August 2020, the Business Roundtable, a global alliance of the world's top business leaders announced that the purpose of a business was to create value for itself as well as its customers, employees, shareholders, partners, society and the planet. Shortly afterwards, the World Economic Forum (WEF) unveiled its Davos Manifesto 2020

which echoed this same requirement for businesses to create value beyond just enriching their shareholders. While these aspirational announcements sound compelling, they are incomplete. This is because two key questions remain unanswered:

1. How specifically can this complex, multi-stakeholder view of value be consistently and objectively measured and managed?
2. How can these measurements then help businesses create the highest levels of value for each of these stakeholder groups?

As outlined in our 1st white paper, *Valuing Value*, the mindset of value measurement and management requires (1) clear goals that are (2) objectively measured, (3) transparently reported on and (4) that go beyond binary yes/no variables. In addition to this, the terms used and processes employed for these value measurement must not be so complex or complicated that they make their implementation out of reach for any micro, small or medium enterprise without the resources to hire a consulting firm to assist in their value measurement efforts. Nor at the same time can the reports developed by companies related to their value impacts be so complicated or convoluted that the average reader will not understand what is being said or report on in the first place.

Any system developed to measure and manage value that does not adhere to these requirements enables businesses to “value wash”, a term we’ve coined to represent any misrepresentation of actual value impacts that a business makes on its stakeholders either accidentally or on purpose (Sugai, 2021).

Our 1st white paper found that existing reporting and disclosure systems unfortunately do not mandate these requirements and are therefore being employed in many cases to create rather than remove value washing from everyday business practices. Because of this, investors in companies who value wash their value impacts face increasing levels of unknown risk in their investments as these hidden impacts on stakeholders remain undocumented and threaten to undermine future revenues and profits. At the same time, corrective or collaborative measures to optimize value for a business's stakeholders remain limited because the actual impacts cannot yet be clearly seen.

This leads to two essential points for any organization hoping to embrace and promote a more sustainable, value-focused approach to business.

POINT #1: ELIMINATION OF VALUE WASHING REDUCES INVESTOR RISK WHILE INCREASING POSITIVE VALUE IMPACTS.



Understanding this, global regulatory bodies and governments continue to push for increased reporting and greater transparency. The latest movement towards consolidation of impact reporting frameworks under the International Sustainability Standards Board (ISSB) after the COP26 conference underscores this point, as do Europe's EFRAG sustainability reporting standards.

In a business environment where the aim is to obfuscate the truth, ignore actual impacts or to deflect attention to the more insidious impacts that businesses actually have, the importance of these regulatory efforts cannot be understated. These efforts are not new and are in line with other global sustainability reporting initiatives such as the Global Reporting Initiative (GRI) whose purpose is to help companies move from not reporting or under-reporting their impacts to full and transparent disclosure of their impacts across key stakeholder groups.

Based on this, we can then plot a company's approach to impact reporting efforts along a linear axis called "Objective, Transparent reporting on Impacts" scaled from negative to positive as shown in Figure 1 below. The ISSB, GRI and other competing standards all aim to help companies move from subjective and opaque impact reporting practices or none at all, to increasingly higher levels of objectivity and transparency of their stakeholder impacts. In and of itself, this commitment to transparent reporting must be applauded.

Figure 1: Impact Reporting

Negative

X= Objective, Transparent Value Impact Reporting

Positive

While there remains strong opposition to these regulatory efforts and their efficacy, our research shows that reporting alone can not and must not be the end goal of sustainability reporting. Instead, it is essential to consider this as the first step in accounting for positive and negative value impacts on various stakeholders.

POINT #2:
OPTIMIZING
VALUE FOR ALL
STAKEHOLDERS
IS THE
ULTIMATE GOAL
OF
SUSTAINABILITY
REPORTING



Clearly, as we have seen over the past decades, the increased reporting of impacts while fundamental, has been insufficient in bringing about tangible change in negative impacts on a business's stakeholders including its customers, employees, partners, shareholders, society and the planet.

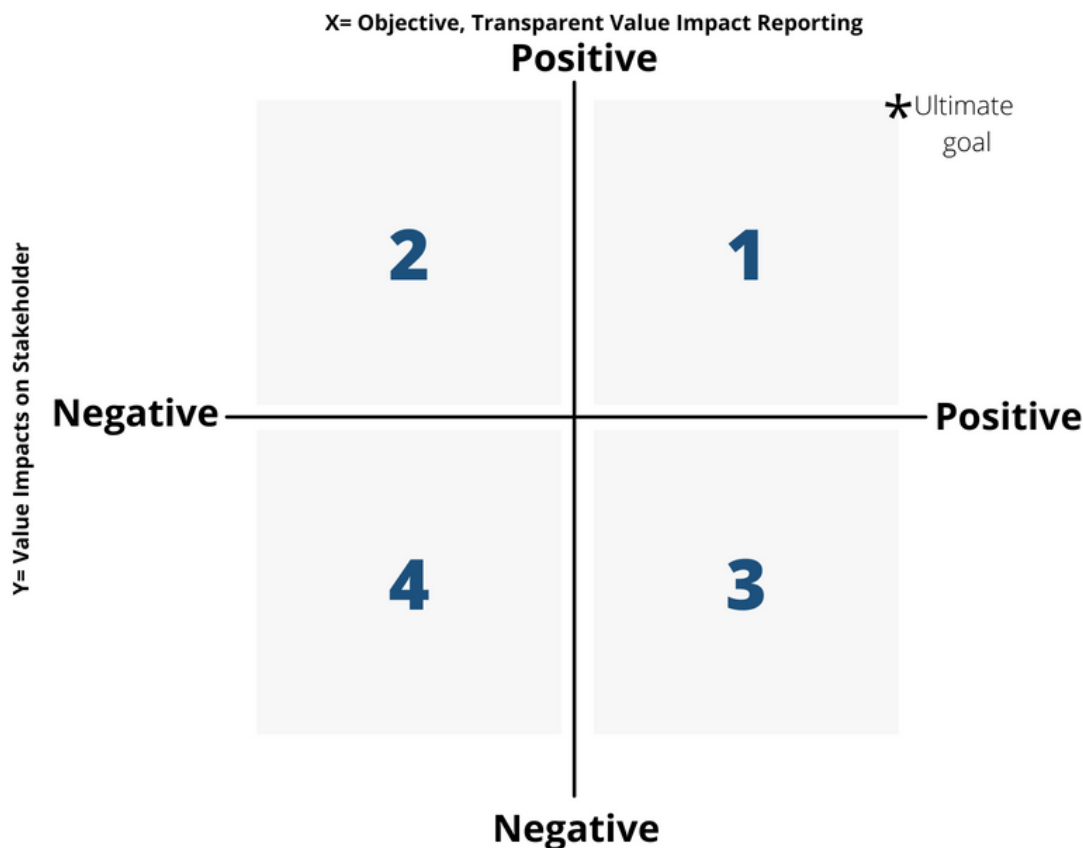
Returning back to the newly revised purpose of business definitions from the Business Roundtable and World Economic Forum, we find the need for a second axis against which to benchmark business sustainability efforts that is focused on the actual value impacts that businesses have rather than just the ones they report on.

Once impacts are recorded and reported, the next step is for businesses to begin to take corrective actions to decrease their negative impacts on each individual stakeholder group. Once this process has started, then management's focus moves to changing value destructive impacts to value creating outcomes. Finally, once value creation has been achieved for each stakeholder individually, then working to consistently improve the amount of overall value created for this entire stakeholder system, and in doing so achieve the highest possible system levels of value creation and social impact.

Based on this idea, Figure 2 below shows four quadrants which each represent different approaches to sustainability efforts, including Quadrant 4, with both negative objectivity & transparency in reporting and negative stakeholder impacts. In such a case, the company actively tries to hide the truth related to its impacts and at the same time has negative impacts on its stakeholders. Quadrant 3 with positive objectivity & transparency in reporting but negative stakeholder value impacts, Quadrant 2 with negative objectivity and transparency in reporting but positive stakeholder value impacts, and Quadrant 1 with both positive levels of objectivity & transparency in reporting and high stakeholder value impacts.

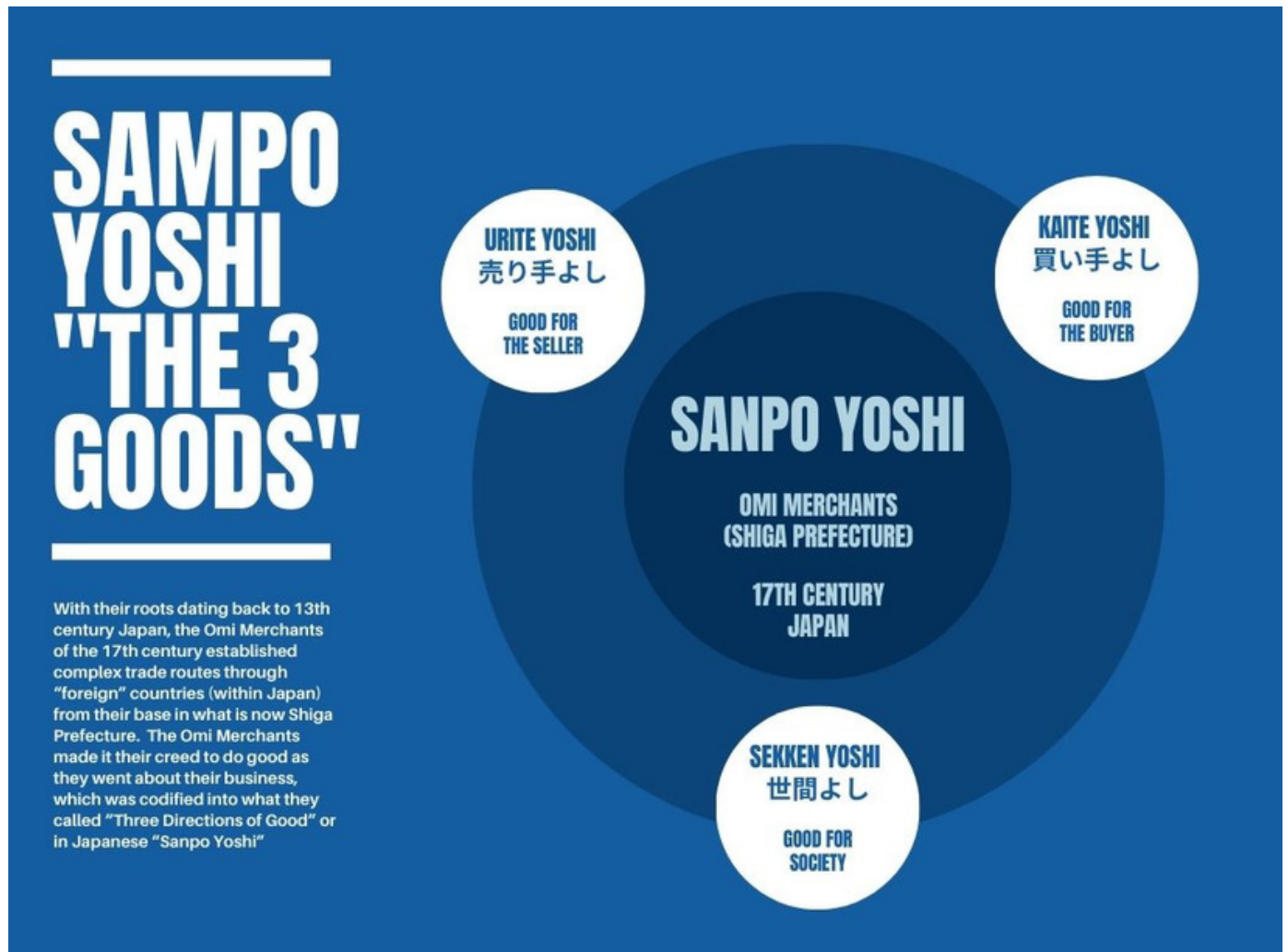
The goal of impact reporting frameworks and businesses who work with them should therefore be to move into consistently higher north-west areas of this chart, entering Quadrant 1 and ultimately aiming for the top right corner of this quadrant.

FIGURE 2: THE 4 QUADRANTS OF SUSTAINABILITY EFFORTS



ALIGNMENT WITH JAPANESE BUSINESS PHILOSOPHY

Unlike in the West, where business was built in relative harmony with ethical customs and practices of society, in early Japan Confucian principles suggested that the aim for profits was unethical and detrimental to social good. From this initial negative view of the merchant and business owner within Japanese society, early Japanese business philosophers such as Ishida Baigan (1685 – 1744) argued that ethical business practices were the only correct form of business and urged merchants and business leaders to focus on broader value creation for stakeholders while extracting only the necessary level of profits to power their businesses forward in a sustainable manner.



Baigan's view of a business was that of an engine for creating social good. As his disciples became more dogmatic in their interpretations of his teachings, his overall social movement lost momentum, but the fundamental business philosophy that he taught inspired the Ohmi merchants of the 17th century to codify the thinking of the larger purpose of a business into a now famous business philosophy that remains prevalent even in many successful businesses in Japan today called "Sanpo Yoshi" or "The three directions of value". These mandate that

business success hinges on creating good for (1) the buyer, (2) the seller, and (3) society as a collective whole. Failure to achieve any of these meant that a business could not truly be considered a “success” even if it was highly profitable for its owners. More recent proponents of such principles have repeatedly shown that a more ethical capitalism, where value for other stakeholders is optimized while simultaneously creating shareholder value is not only possible, but can serve as the foundation for long-term competitive advantage and sustainability of a business.

IT SHOULD NOT BE SURPRISING THAT OF ALL BUSINESSES THAT ARE 200 YEARS OLD OR OLDER THAT 56% OF THESE ARE LOCATED IN JAPAN. WHEN SOCIAL IMPACT AND LONG-TERM SUSTAINABILITY ARE THE ULTIMATE GOAL OF A BUSINESS, DAMAGING A KEY STAKEHOLDER FOR THE SHORT-TERM GAIN OF THE BUSINESS BECOMES IMPOSSIBLE.

With this foundation at the heart of Japan’s early embrace of capitalism, it should not be surprising that of all businesses globally that are 200 years old or older that 56% of these are located in Japan. When social impact and long-term sustainability are the ultimate goal of a business, damaging a key stakeholder for the short-term gain of the business becomes impossible.

This thinking has now gained a strong foundation in the West as well. For example, the concept of Stakeholder Theory was first proposed by Freeman (1984), arguing that the strategic management of a business requires a sensitivity to and a focus on increasing stakeholder value. Similarly in the marketing field Vargo & Lusch’s Service Dominant Logic which was first proposed in 2004, argue that the best way for a firm to succeed is to “serve itself by serving others” (Vargo & Lusch, 2014). This thinking is completely aligned with the more established business philosophy of Japan, and together these serve as a solid foundation upon which to build a value measurement and management model simultaneously aligned with the newly defined purpose of a corporation which spans across seven key stakeholder groups.

REVIEW OF OUR PAST WORK IN VALUING VALUE

As outlined in the first Valuing Value white paper (Sugai et al., 2021), both the Business Roundtable and World Economic Forum have argued that there are 7 key stakeholder groups for which a business and its management team must strive to create value including (1) the company itself and its (2) customers, (3) employees, (4) shareholders, (5) partners, (6) society within which it is embedded, and (7) the planet.



Based on this, in our first phase of our research, we followed a 5-step process to first check whether or not existing ESG and sustainability reporting frameworks could help measure and manage value impacts across these stakeholders, and if so, specifically how they could be combined to effectively do so. In this second paper, we followed this same process as well. Below is the explanation of this five-step process from the Valuing Value white paper:

SECTION 1: OUR PROCESS

STEP 1: COLLECTED PUBLICLY AVAILABLE IMPACT MEASUREMENTS/ESG DISCLOSURE REQUIREMENTS

With funding from Doshisha University's special COVID-19-related research budget, our research team collected 357 publicly reported impact measurement indicators from 15 of the world's top sustainability reporting frameworks including (1) the UN's Sustainable Development Goals (SDGs), (2) the Global Reporting Initiative (GRI), (3) Global Impact Investing Network's GIIN-IRIS+, (4) the Sustainability Accounting Standards Board (SASB), (5) B-Lab's B Impact Assessment (BIA), (6) the International Living Future Institute's JUST 2.0, The Capitals Coalition's (7) Natural Capital Protocol and (8) Social & Human Capital Protocol, Canada's (9) Common Approach to Impact Measurement, The UK's (10) The National TOMs Framework, Michael Porter's (11) Creating Shared Value, Richard Branson's (12) The B-Team, RBL's (13) Organizational Guidance System, (14) McKinsey's Five Fifty psychological safety framework, and McDonough & Braungart's (15) Cradle to Cradle Certification.

Each of these 357 indicators was entered in its entirety into a database that we created using Microsoft Excel, and was given a unique numerical ID that was used throughout our analysis efforts to ensure that the actual contents and meaning of each micro-indicator was not misinterpreted or mixed together with a similar meaning from a different sustainability framework.

STEP 2: ALIGNED THESE WITHIN STAKEHOLDER CATEGORIES

To (1) confirm that the stakeholders that the Business Roundtable and World Economic Forum had mentioned were reflected in these impact measurements, and (2) that there weren't any other stakeholders that had been overlooked by these organization, we read through each individual indicator and placed it within one main stakeholder category.

As shown in Figure 3, we found that impact measurements for six of the seven stakeholder categories existed that were multifaceted and robust. Within these 357 indicators we found that 31.9% (n=114) were related to employees, 24.9% (n=89) were related to the environment, 14.0% (n=50) were related to the firm and its governance, 12.9% (n=46) were related to society, 8.1% (n=29) were related to partners, 8.1% (n=29) were related to customers, and none (n=0) were related to shareholders. While we were at first surprised that there were no impact measurements specifically for shareholders, we concluded that this was because existing measures of shareholder value are widely understood and accounted for in traditional finance and accounting practices, therefore the ESG reporting frameworks that were included in our study clearly felt there was no need to include them again in additional ESG reporting frameworks.

FIGURE 3: SEPARATING MICRO-INDICATORS INTO STAKEHOLDER GROUPS

Value Actors	B Impact Assessment	B Team	Common Approach to Impact	GIIN - IRIS+	GRI	JUST	Mckinsey	Measuring Shared Value	Natural Capital Coalition	Organization Guidance System	SASB- Apparel Accessories & Footwear	SASB- Ecommerce	SDG	Social and Human Capital Coalition	The National TOMs	Cradle To Cradle Certified
Employee	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Environment	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Society	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Firm	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Customer	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Partner	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Shareholder	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

STEP 3: CREATED MACRO-INDICATOR GROUPINGS

Working to address the issue of complexity, within each of these six stakeholder categories, we then worked to organize micro-indicators that shared similar a similar focus into what we have called “macro-indicators.” This process is similar to how code families are created from individual codes during qualitative data analysis work. From these efforts, we were able to simplify the 357 micro-indicators that we had collected into 26 macro-indicator categories as shown in Figure 4 below.

FIGURE 4: DEFINING MACRO INDICATOR CATEGORIES

Value Actors	Macro Indicators	Micro-Indicators	Frameworks
Employee 114	Employee: Diversity & Equity	13	8
	Employee: Fair Wages	10	5
	Employee: Health, Welfare, Safety	33	10
	Employee: Development	29	8
	Employee: Engagement and Satisfaction	16	6
	Employee: Human Rights	13	6
Environment 89	Environment: Waste and Pollution	28	8
	Environment: Water	20	6
	Environment: Energy	9	5
	Environment: Products	19	8
	Environment: Biodiversity	10	7
	Environment: Buildings and Land	3	3
Society 46	Society: Appropriate Taxes	5	2
	Society: Local Community Development	20	7
	Society: Local Employment and Engagement	15	6
	Society: Charity and Volunteerism	6	3
Firm 50	Firm: Transparent Financial Reporting	13	5
	Firm: Governance and Firm Structure	37	5
	Firm: Management Capability	0	0
Customer 29	Customer: Truth in Communications	3	1
	Customer: Privacy	9	5
	Customer: Satisfaction, Health, and Safety	17	7
Partner 29	Partner: Reporting	7	4
	Partner: Structure	6	3
	Partner: Environment & Society	8	5
	Partner: Fair Labor	8	4
Shareholder	Shareholder:EVA	0	0

As Figure 4 shows, we identified six macro-indicators that explain how to measure Employee Value including (1) Diversity & Equity, (2) Fair Wages, (3) Health, Welfare & Safety, (4) Development, (5) Engagement and Satisfaction, and (6) Human Rights. Similarly, six macro-indicators for Value for Nature were distilled from this data and included (1) Waste and Pollution, (2) Water, (3) Energy, (4) Products, (5) Biodiversity, and (6) Buildings and Land. For Value for Society, four macro-indicators were found including (1) Taxes, (2) Local Community Development, (3) Local Employment & Engagement, and (4) Charity and Volunteerism.

Related to firm value, three macro-indicators emerged from the data including (1) Transparent financial reporting, (2) Governance & firm structure, and (3) Management capability. Regarding Customer value, three macro-indicators were identified including (1) Truth in Communications, (2) Privacy and (3) Satisfaction, health and safety. Finally, related to Partner Value, four macro-indicators were identified including (1) Reporting, (2) Structure, (3) Environment & Society, and (4) Fair Labor. Figure 4 also includes two additional pieces of data. The first column to the right of the macro-indicator name, “Micro-Indicators” shows the number of micro-indicators that are housed within each macro-indicator. The second column “Frameworks” lists the number of different sustainability frameworks (i.e. GRI, BIA, etc.) from which these micro-indicators were sourced. While we are confident that all macro-indicators are fully grounded in the data that was collected, it is clear that some of these indicators are more deeply ingrained across multiple frameworks, as well as measured from a variety of different perspectives. For example, Employee health welfare and safety is comprised of 33 individual micro-indicators that were sourced from 9 of the 15 sustainability frameworks, making it a very rich macro-indicator, whereas Customer relationships were only mentioned by 1 of the 15 sustainability frameworks having only 3 unique micro-indicators.

STEP 4: SCORING EACH MICRO-INDICATOR

With all micro-indicators organized into larger macro-indicator categories, we then explored the quality of each micro-indicator across the first four metrics that we identified in the introduction, including whether or not they were:

1) Goal-based: An indicator that had a clear goal or end-state that it was driving at was given 1 point if it did, and 0 points if it did not. We specifically defined a goal-based indicator as one that “Clearly stated the goal of the measurement, identify a number or reference standard(s) that can specify the goal that this measurement aims to achieve. For example, from the JUST 2.0 system related to “Gender pay equity” lists four levels of goal achievement, with its Level 4 goal stating that an “Organization has a written policy that documents its gender pay equity,” and that the “Organization must have a gender equity pay-scale with a maximum variance in pay of 5 percent between genders within each of the organization’s pay scale classes.” This micro-indicator was given 1 point for being goal based. However, The B-Team’s approach to this same issue also focuses on gender pay equity, but does so without defining a clear end-goal as JUST’s system does, stating that “Businesses uphold gender balance, diversity and inclusion not only as the right thing to do, but as a driver of shifting norms and delivering better business performance as well as economic growth.” While this clearly addresses gender, diversity and inclusion issues within any organization, it fails to list a clear end-state or goal, and therefore received 0 points within our assessment.

2) Objectively Measured: We defined objectively measured as any indicator that showed a clear, objective unit of measurement that was logical and reasonable for us to understand.

Specifically, this measure should have no chance for bias and the measurement for this indicator must not be based on individual judgement. An indicator that could be objectively measured was given 1 point, and those that could not be were given 0 points.

For example, related to the reduction of greenhouse gas (GHG) emissions, GRI disclosure 305-5 requires companies to report on:

- a. GHG emissions reduced as a direct result of reduction initiatives, in metric tons
- b. Gases included in the calculation (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all)
- c. Base year/Baseline (the rationale for choosing it)
- d. Scope in which reduction occurred (Scope 1,2,3)
- e. Standards, methodologies, and assumptions used

This GRI disclosure is fundamentally objective in that metric tons of gasses can be measured at the same time and from the same location by two different sensors and unless one of them is faulty, the results will be the same. On the other hand, a non-objective goal would be similar to the Organizational Guidance System's question on employee/customer/community relationships, asking respondents "Rate on a scale from 1-5 the current state of your business about positive relation between employees and customers/community," which is clearly a subjective measurement scale, and therefore received zero points.

3) Independently Checkable (Transparency): In addition to whether or not an indicator was objective, the question remained as to whether or not an independent outside 3rd party could (easily) check and confirm that what was reported by a company was matched by actual data. Our definition of this rating was that the information could be "checked by using transparent data that an outsider could access or obtain." We allocated zero points to those micro-indicators that were not independently checkable, 1 point for those that could be independently checkable, but that we did not have proof that this checking was actually being done, and 2 points for those indicators that were in fact independently checkable and we had evidence that this feedback loop was healthily in place.

For example, related to the Organizational Guidance System measurement discussed in #2 above, clearly this rating of a relationship between employees and customers/community has no independent measure that is regularly published and accessible by an outside third party. Because of this, this indicator also received zero points for transparency. For the GRI disclosure 305-5 listed above, it is conceivable that remote sensors could be placed on all GHG emitting facilities with GHG emissions data openly documented and reported on. However, we could find no evidence in the GRI Disclosure 305-5 discussion explaining a

transparent way or system for companies to actually do this, nor could we find consistent evidence from GRI companies globally of a standard way of transparently reporting on their GHG emissions and reductions. Because of this, GRI Disclosure 305-5, and in fact, all other micro-indicators that we collected could not achieve the maximum 2-point score within this rating criteria. The highest score achieved by any micro-indicator within our assessment then was 4 points.

4) Varies: One of the surprises of our initial efforts in Step #1 was the number of micro-indicators that simply required companies to file a report, with points given for simply filling in details rather than its contents. For example, within some of the frameworks we've studied it is possible to receive a positive score for reporting on the percentage of women on a company's board of directors, even if that number is zero. The fact that this is reported satisfies the disclosure requirement with no qualification of the actual behaviors undertaken by that company. This was true across a number of different themes and topics, and we therefore added this final rating of an indicator based on its ability to highlight finer details beyond black and white, yes-no answers. We specifically defined this rating as receiving zero points if "the scale that is used for this measurement is a nominal, binary, or a yes/no question," and eligible to receive 1 point if the micro-indicator was measured using an ordinal, interval or ratio scale.

Based on this analysis of the indicators used across all the assessment frameworks we studied, as shown in Figure 5 we found that 0% (n=0) indicators achieved a full five-point score as we have explained above, and that only 5.3% achieved a 4-point score. This left 94.7% of the indicators that we rated (n=341) with scores of 3 or less points, with 30.8% (n=110) scoring 3 points, 16.8% (n=60) scoring 2 points, 23.5% (n=84) scoring 1 point, and 23.5% (n=84) scoring zero points. It is an understatement to say that we were surprised by these results, especially that nearly a quarter of all value measurements achieved zero points, meaning that they were yes/no variables without goals that could be objectively and transparently measured, and that nearly another quarter of all value measurements received credit for one of these factors.

One broad conclusion from our analysis is that a significant amount of work needs to be done by the global ESG and sustainability communities to tighten their impact measures to have clearly defined goals, establish methods for the objective and transparent reporting on these, and to ensure that these measures go beyond simple yes/no, present/not-present binary answers. Without such rigor put in place, too many loopholes exist such that any savvy marketing, advertising or PR expert could "re-brand" the company's clearly negative actions into positive ones.

In this step, we also circled back to the original sources of our impact measurement data to confirm that these macro-indicators were for the most part supported by more than one organization. As shown in Figure 6 below, except for the two macro-indicator categories that we have created for Shareholders and Firm Capability (that we will discuss in detail subsequently), all macro-indicators were derived from at least one of the frameworks we had

studied and in most instances there were a number of frameworks focused on exactly the same issue.

FIGURE 5: INDICATOR SCORING RESULTS

Value Actors	Macro Indicators	Micro-Indicators	Frameworks	0	1	2	3	4	5
Employee 114	Employee: Diversity & Equity	13	8	2	0	0	7	4	0
	Employee: Fair Wages	10	5	0	0	2	6	2	0
	Employee: Health, Welfare, Safety	33	10	7	8	4	10	4	0
	Employee: Development	29	8	9	11	5	3	1	0
	Employee: Engagement and Satisfaction	16	6	2	6	6	2	0	0
	Employee: Human Rights	13	6	3	0	1	9	0	0
Environment 89	Environment: Waste and Pollution	28	8	7	1	9	11	0	0
	Environment: Water	20	6	6	5	2	7	0	0
	Environment: Energy	9	5	1	0	6	2	0	0
	Environment: Products	19	8	9	1	5	0	4	0
	Environment: Biodiversity	10	7	3	4	1	2	0	0
	Environment: Buildings and Land	3	3	1	0	0	1	1	0
Society 46	Society: Appropriate Taxes	5	2	4	1	0	0	0	0
	Society: Local Community Development	20	7	6	9	3	2	0	0
	Society: Local Employment and Engagement	15	6	5	1	0	8	1	0
	Society: Charity and Volunteerism	6	3	0	2	0	2	2	0
Firm 50	Firm: Transparent Financial Reporting	13	5	1	1	1	10	0	0
	Firm: Governance and Firm Structure	37	5	6	20	6	5	0	0
	Firm: Management Capability	0	0	0	0	0	0	0	0
Customer 29	Customer: Truth in Communications	3	1	0	0	0	3	0	0
	Customer: Privacy	9	5	2	2	0	5	0	0
	Customer: Satisfaction, Health, and Safety	17	7	7	4	0	6	0	0
Partner 29	Partner: Reporting	7	4	0	3	0	4	0	0
	Partner: Structure	6	3	2	4	0	0	0	0
	Partner: Environment & Society	8	5	0	1	4	3	0	0
	Partner: Fair Labor	8	4	3	0	4	1	0	0
Shareholder	Shareholder:EVA	0	0	0	0	0	0	0	0

FIGURE 6: MAPPING MACRO-INDICATORS BACK TO SUSTAINABILITY FRAMEWORKS

	B Impact Assessment	B Team	Common Approach to Impact	GIIN - IRIS+	GRI	JUST	Mckinsey	Measuring Shared Value	Natural Capital Coalition	Organizational Guidance System	SASB-Apparel Accessories & Footwear	SASB-Ecommerce	SDGs	Social and Human Capital Coalition	The National TOMs	Cradle To Cradle Certified
Employee: Diversity & Equity		o		o	o	o						o	o	o	o	
Employee: Fair Wages	o		o	o	o	o										
Employee: Health, Welfare, Safety	o				o	o	o	o	o	o				o	o	
Employee: Development	o		o	o	o	o				o			o	o		
Employee: Engagement and Satisfaction	o				o	o				o		o		o		
Employee: Human Rights		o		o	o								o	o	o	
Environment: Waste and Pollution	o	o		o	o				o			o	o		o	
Environment: Water	o			o	o				o		o	o	o			
Environment: Energy					o			o	o			o	o			
Environment: Products	o				o	o		o	o		o	o			o	o
Environment: Biodiversity				o	o	o			o	o			o		o	
Environment: Buildings	o											o			o	
Society: Taxes					o									o		
Society: Local Community Development	o				o			o		o			o	o	o	o
Society: Local Employment and Engagement	o				o	o								o	o	
Society: Charity and Volunteer	o					o									o	
Firm: Reporting	o			o	o					o			o			
Firm: Governance	o	o		o	o					o						
Firm: Management Capability																
Customer: Relationship					o											
Customer: Privacy	o			o	o							o		o		
Customer: Satisfaction, Health, and Safety	o			o	o					o	o		o	o		
Partner: Reporting	o			o	o										o	
Partner: Structure	o				o	o		o						o		
Partner: Environment & Society	o				o	o				o					o	
Partner: Fair Labor					o							o		o	o	
Shareholder:EVA																

STEP 5: DEFINE SPECIFIC GOALS FOR EACH MACRO-INDICATOR

With each micro-indicator allocated within one of the 26 specific macro-indicator categories, we then continued to organize micro-indicators within each of these categories so that we could clearly define exactly what each macro-indicator was intended to achieve, and to operationalize these definitions into specific, measurable goals. As outlined above, while most individual indicators were poor at achieving a full five-point scale based on our assessment criteria, when joining these together into larger goals, it became possible to develop clear goals through aggregation around these specific themes.

Ultimately, a 27th theme focused on shareholder value measurement was added, and in total 80 goals were derived within these 27 themes, which included specific KPIs from their original ESG and sustainability reporting framework sources for how these could be benchmarked and measured.

TESTING MODEL VALIDITY

From July 2021 through February 2022, our research team collected an additional 346 impact measurements from six (6) new data sources including the newly released International Sustainability Standards Board (ISSB)’s Prototype Climate-related

Disclosures, the Stockholm Resilience Center’s Planetary Boundaries, The International Finance Corporation’s (IFC) Performance Standards, the UNDP’s SDG Impact Standards for Enterprises, the Science Based Target’s climate disclosures, and the Task Force on Climate-related Disclosures (TCFD) guidance on metrics, targets, and transition plans.

To test the validity of our initial model, we retained the existing 7 stakeholder, 27 theme, 80 goal model, and assigned each of these new impact measurements into these existing categories where possible. We kept track of any measurements that did not fit precisely into a single category, could potentially fit into multiple categories, or for which an appropriate category did not exist. Upon completion of this process for each framework, we discussed any categorization issues that we encountered as well as the framework’s overall relationship with our model.

FIGURE 7: STAKEHOLDER GROUP COVERAGE OF NEW FRAMEWORKS

Value Actors	Planetary Boundaries	International Finance Corporation	United Nations Development Programme	Science Based Targets Initiative	International Sustainability Standards Board	Task Force on Climate-Related Financial Disclosures
Employee		o				
Environment	o	o		o	o	o
Society		o				
Firm		o	o		o	o
Customer						
Partner		o			o	
Shareholder						

All 346 of these new impact measurements matched directly with our existing stakeholder categories. 65.3% (n=226) were related to the environment, 20.8% (n=72) were related to the firm and its governance, 9.8% (n=34) were related to society, 1.2% (n=4) were related to partners, and none (n=0) were related to customers or shareholders. Figure 7, above, displays the stakeholder groups we assigned to each of these six new frameworks. We did not encounter any impact measurements for which the appropriate stakeholder classification was unclear or did not already exist in our model.

We found that 345 of these 346 new impact measurements matched precisely with our existing 27 themes. While we occasionally encountered measurements that could fit into multiple themes, we did not find any that were not accurately described by our existing model. Figure 8 displays the themes that each of these frameworks contribute to the

FIGURE 8: THEME COVERAGE OF NEW FRAMEWORKS

	Planetary Boundaries	International Finance Corporation	United Nations Development Programme	Science Based Targets Initiative	International Sustainability Standards Board	Task Force on Climate-Related Financial Disclosures
Employee: Diversity & Equity		o				
Employee: Fair Wages						
Employee: Health, Welfare, Safety		o				
Employee: Development						
Employee: Engagement and Satisfaction						
Employee: Human Rights		o				
Environment: Waste and Pollution	o	o		o	o	o
Environment: Water	o	o			o	
Environment: Energy					o	
Environment: Products					o	
Environment: Biodiversity	o	o			o	
Environment: Buildings		o			o	
Society: Taxes						
Society: Local Community Development		o				
Society: Local Employment and Engagement		o				
Society: Charity and Volunteer						
FIRM: Reporting					o	
Firm: Governance		o	o			o
Firm: Capability		o				
Customer: Relationship						
Customer: Privacy						
Customer: Satisfaction, Health, and Safety						
Partner: Reporting						
Partner: Structure						
Partner: Environment & Society					o	
Partner: Fair Labor		o				
Shareholder: Structure						
Shareholder:EVA						
	3	12	1	1	8	2

Value Model. Figures 7 and 8 both highlight the significant difference in scope between a comprehensive framework like IFC and a narrowly targeted measurement standard like SBTi. Of these 346 new impact measures, 99.7% (n=345) fit entirely within our existing 80 goals, matching directly with at least one goal within our theme and stakeholder categories. However, one impact measurement from ISSB’s new guidance on palm oil could not be aligned perfectly with our existing goals within our 5th theme in the Nature stakeholder category “Biodiversity”. Because of this, one new goal, “zero palm oil use” was added to our pre-existing biodiversity theme, bringing our total number of goals to 81. Aside from this, our model testing exercise resulted in greater confidence in the validity of our model, as the process of nearly doubling the data resulted in no new stakeholder or theme classifications, and only one new goal.

Based on the benefits we found from this experience, we will continue to update the data included within our Value Model as scientific consensus evolves and in keeping with developments within and across stakeholder groups.

GRADING OUR NEWEST DATA SOURCES:

Following the same process applied to our initial set of sustainability reporting frameworks in our June 2021 Valuing Value paper, we assessed each impact measurement for its (1) objective measurement (zero vs one point), (2) whether it was independently checkable with evidence of such practices (zero, one or two points), (3) whether it used an ordinal scale or higher variable (zero or one point), and (4) whether it included an end-goal (zero or one point).

As this phase of our research also included a pre-existing model that we could benchmark new frameworks against, we also scored each of these six new frameworks as follows:

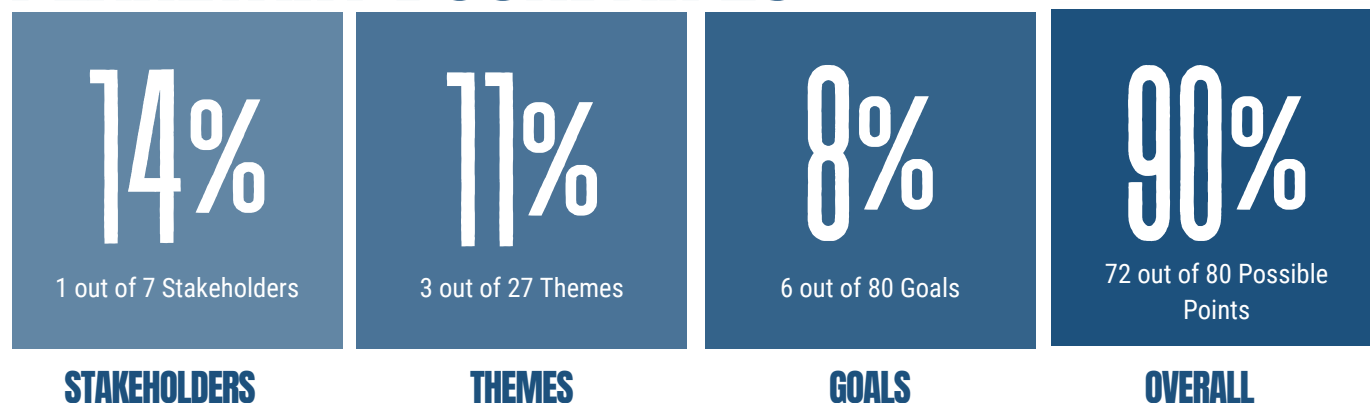
- 1. Stakeholder coverage:** Of the seven total stakeholders included in the Business Roundtable and World Economic Forum's definitions of the purpose of a business, how many were covered by each framework.
- 2. Theme coverage:** Of the 27 themes identified in our first phase of research, how many of these were covered by each framework.
- 3. Goal coverage:** Of the 80 goals identified in our first phase of research, how many of these were covered by each framework.
- 4. Total points, total possible, framework score:** After scoring each impact measurement against our existing assessment model, we created a "total points" score by summing the points earned by all impact measurements within a single framework. We then created a "total possible" score by multiplying each measurement by the maximum score of 5 points. By dividing the total points score by the total possible score, we arrived at the overall "framework score," which we have shown as the percentage of total possible points that the framework's impact measurements achieved. We concluded that the higher the percentage, the more reliable the framework would be in measuring the value impacts that it covered.

SCORING SIX NEW FRAMEWORKS

Our analysis of these six new frameworks found the following:

Framework	Stakeholder Coverage	Theme Coverage	Goal Coverage	Overall Score
Stockholm Resilience Center's Planetary Boundaries	14% 1 out of 7	11% 3 out of 27	8% 6 out of 80	90% 71 out of 80 Possible
International Finance Corporation (IFC)	71% 5 out of 7	37% 10 out of 27	18% 14 out of 80	40% 124 out of 335 Possible
UNDP SDG Impact Standards for Enterprises	14% 1 out of 7	4% 1 out of 27	3% 2 out of 80	17% 47 out of 275 Possible
Science Based Targets Initiative (SBTi)	14% 1 out of 7	4% 1 out of 27	1% 1 out of 80	100% 5 out of 5 Possible
International Sustainability Standards Board (ISSB)	43% 3 out of 7	30% 8 out of 27	28% 22 out of 80	42% 421 out of 1000 Possible
Task Force on Climate-related Financial Disclosures (TCFD)	29% 2 out of 7	7% 2 out of 27	4% 3 out of 80	0% 0 out of 35 Possible

PLANETARY BOUNDARIES



DISCUSSION

The Stockholm Resilience Centre’s Planetary Boundaries framework identifies nine major processes that govern Earth’s environmental stability: Stratospheric ozone depletion, biosphere integrity, chemical pollution & novel entities, climate change, ocean acidification, freshwater use, land-system change, biogeochemical flows, and atmospheric aerosol loading. The framework then establishes “planetary boundaries” – the safe, sustainable operating space for human activities.

We added the Planetary Boundaries to the Value Model by integrating the sixteen new impact measurements from this framework into our Nature stakeholder category. We categorized eight of these measurements as N1 - Waste and Pollution, four as N2 - Water, and four as N5 - Biodiversity. The Planetary Boundaries are our highest-scoring set of impact measurements thus far; all sixteen measurements received a full five points in our assessment framework as each one is goal-based, objectively measured, independently checkable, and includes a scale variable for measurement.

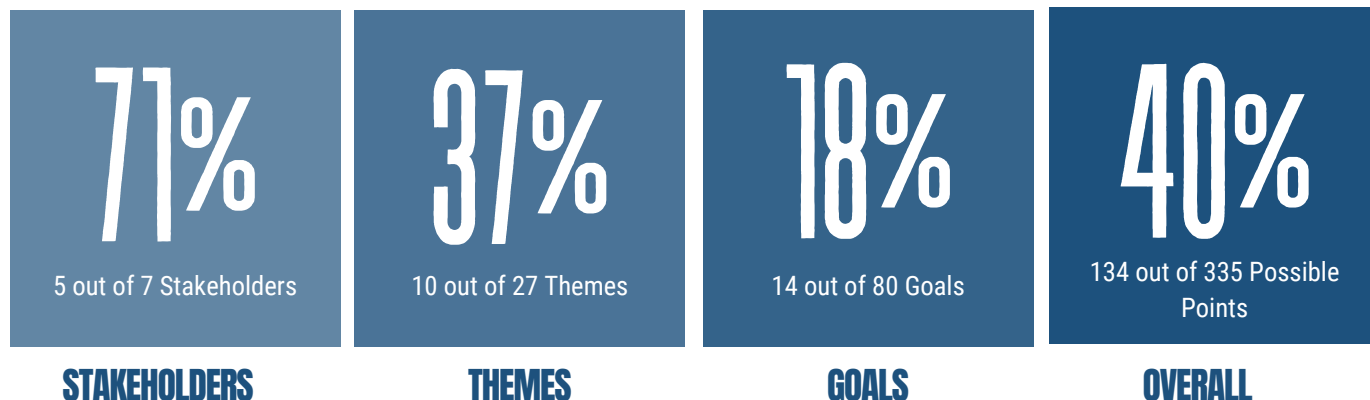
NATURE	NUMBER OF IMPACT MEASUREMENTS
N1: WASTE AND POLLUTION	
N1-A: Carbon Neutral	3
N1-B: Zero Non-GHG Air Emissions	2
N1-D: 100% Waste Reclamation and Recycling	3
N2: WATER	
N2-A: Water Infrastructure Interaction Strategy	2
N2-C: Discharge Water Quality	2
N5: BIODIVERSITY	
N5-A: Net Zero Biodiversity Impact	4
Total Impacts for Nature	16

PLANETARY BOUNDARIES



The only issue we encountered while adding the Boundaries to our model is that they are extremely high-level limits governing enormous Earth systems. They are not designed to guide the decision-making processes of individual businesses, creating a gap that must be filled. Accordingly, the Planetary Boundaries serve two main purposes within our Value Model: First, to ensure that our model keeps firms' environmental impacts well within the boundaries. Second, to translate the planet and region-level boundaries into metrics and goals relevant to firms of all sizes, via integration with firm-level impact measurement systems. By pairing the Planetary Boundaries with firm-level impact reporting and goal-setting metrics, we hope to comprehensively document and address the environmental challenges facing stakeholders at all levels.

INTERNATIONAL FINANCE CORPORATION (IFC)



DISCUSSION

The IFC's Performance Standards are designed to be a comprehensive environmental and social impact reporting framework. IFC emphasizes the creation of an environmental and social management system developed through active stakeholder engagement. We added all of the IFC Performance Standards into our Value Model integrating 67 new impact measurements across five of our seven existing stakeholder groups.

IFC's impact measurements scored very consistently; all received two points each, one for objective measurability and another for independent checkability. The Performance Standards' impact metrics were all measured nominally or as a binary yes/no, precluding any points for ordinal scoring. Additionally, as a reporting-oriented framework, IFC by design does not set goals or limits for firms to comply with. Its integration with the Value Model adds, as the name suggests, goals for the reporting categories to work towards.

IFC added a large amount of useful qualitative information for five of the seven stakeholders in our framework. In particular, the Performance Standards contributed a set of fundamental workers' rights, as well as new societal impact considerations related to indigenous peoples' rights and the management of culturally significant sites and artifacts. IFC contributed supply chain monitoring impact measurements as well as detailed emergency preparedness and risk management guidelines.

Two major themes were present throughout IFC's guidance. First, the Performance Standards' approach to ESG impact reporting centered around policy and management, rather than quantitative impact measurement standards. Second, IFC emphasized stakeholder involvement to a very high degree. Via its Environmental and Social Management System (ESMS), IFC developed a policymaking process designed to encourage active stakeholder participation and give all affected parties a genuine voice in firms' policies.

INTERNATIONAL FINANCE CORPORATION (IFC)



EMPLOYEE	NUMBER OF IMPACT MEASUREMENTS
E1: DIVERSITY AND EQUITY	
E1-A: Full Time Employment	1
E1-B: Ethnic Diversity	1
E3: HEALTH, WELFARE, AND SAFETY	
E3-E: Occupational Safety and Health Coverage	1
E3-F: Employee Mental Health and Wellbeing	1
E6: HUMAN RIGHTS	
E6-B: Human Rights Corrective Action	6
Total Impacts for Employees	10

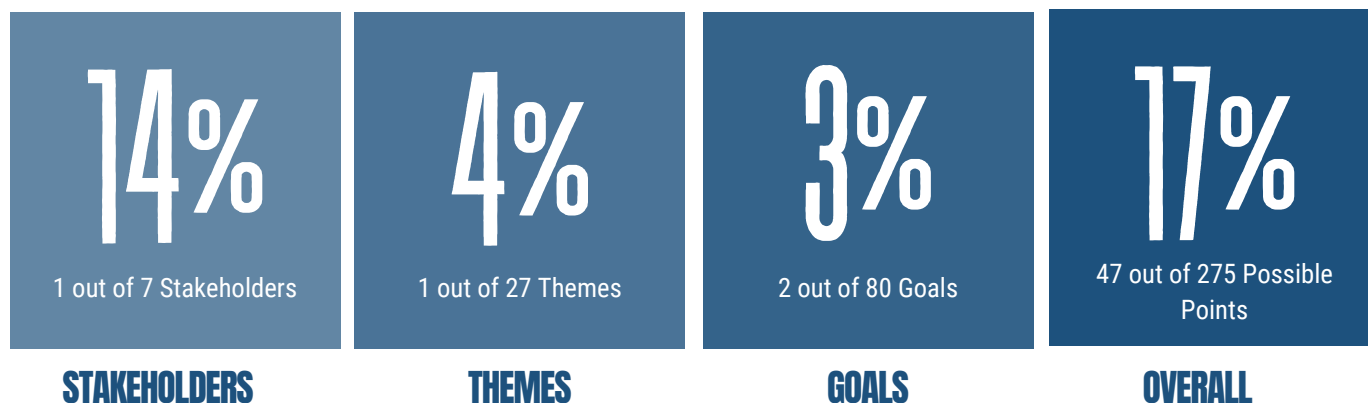
NATURE	NUMBER OF IMPACT MEASUREMENTS
N1: WASTE AND POLLUTION	
N1-B: Zero Non-GHG Air Emissions	1
N1-D: 100: Waste Reclamation and Recycling	4
N2: WATER	
N2-B: Water Use Reporting	1
N5: BIODIVERSITY	
N5-A: Net Zero Biodiversity Impact	7
N6: BUILDINGS AND LAND	
N6-B: 100% Certified Safe and Accessible Buildings	1
Total Impacts for Nature	14

INTERNATIONAL FINANCE CORPORATION (IFC)



SOCIETY	NUMBER OF IMPACT MEASUREMENTS
S2: LOCAL COMMUNITY DEVELOPMENT S2-A: Healthy, Safe, Resilient Community	37
Total Impacts for Society	37
FIRM	NUMBER OF IMPACT MEASUREMENTS
F2: GOVERNANCE F2-B: Governance Reporting F2-D: Outside Director Ratio	3 1
Total Impacts for the Firm	4
PARTNER	NUMBER OF IMPACT MEASUREMENTS
P4: FAIR LABOR PRACTICES P4-A: Fair Labor Practices Throughout Supply Chain and Distribution Channels	2
Total Impacts for Partners	2
Total Impacts added by IFC as a whole	67

UNDP IMPACT STANDARDS



DISCUSSION

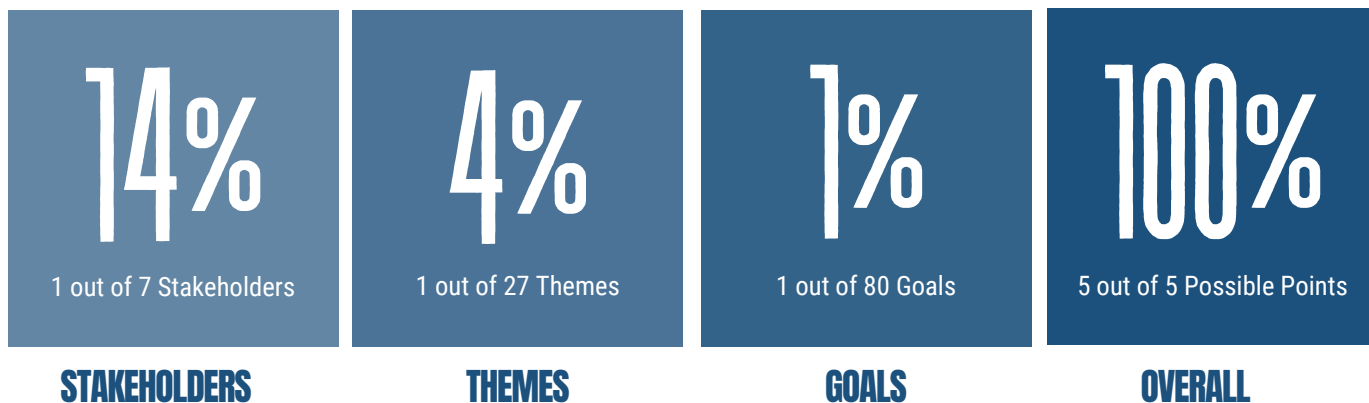
The UNDP’s SDG Impact Standards for Enterprises are designed to integrate the UN’s Sustainable Development Goals with businesses’ organizational and decision-making structures. Unlike the environmental accounting frameworks that contribute most of our Nature stakeholder impact measurements, the UNDP is concerned primarily with structural and procedural change rather than KPI-focused reporting. Instead of reporting on GHG emission levels or product lifecycle impacts, the UNDP asks firms to adopt the SDGs on a foundational level.

We added the UNDP’s guidance to our Value Model by integrating each of the UNDP’s 55 practice indicators into the Firm stakeholder category. We then classified all of these impact measurements as F2 - Governance, making UNDP the single largest contributor to our Governance macro-indicator.

The UNDP’s impact measurements each received relatively low scores in our impact measurement scoring process, with the highest-rated measurements receiving only two points - one point for objective measurability and another for independent checkability. This is largely due to the format of UNDP’s practice indicators, which serve as qualitative instructions for adopting the SDGs without defined measurements or goals. However, the addition of these impact measurements establishes more direct connections between the Value Model and the implementation of the Sustainable Development Goals. While they do not set new goals for firms to reach, UNDP’s intent to align firms’ governance structures and decision-making processes with the SDGs helps them to consider stakeholder value through every aspect of their business.

FIRM	NUMBER OF IMPACT MEASUREMENTS
F2: GOVERNANCE	
F2-A: Mission Driven	37
F2-B: Governance Reporting	18
Total Impacts for Firm	55

SCIENCE BASED TARGETS INITIATIVE (SBTi)



DISCUSSION

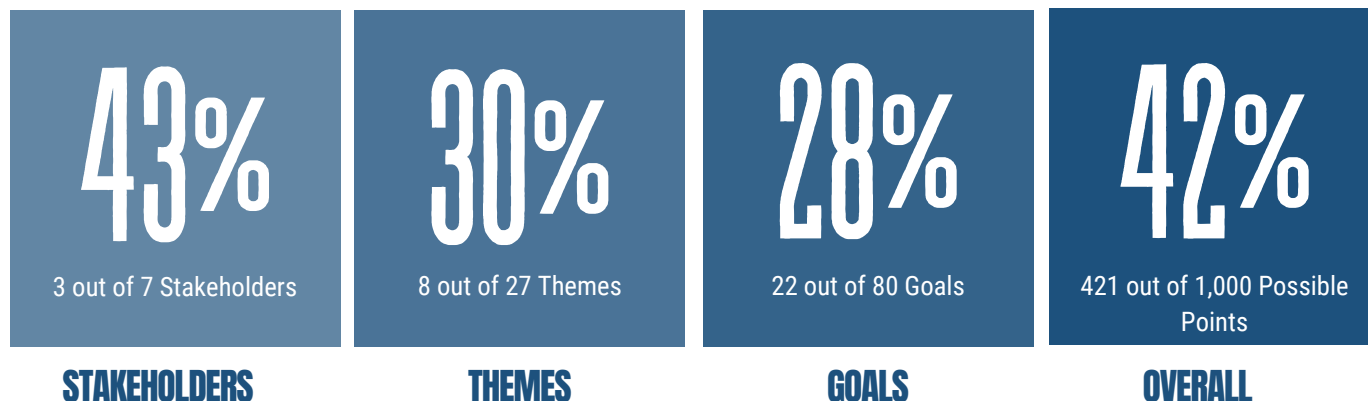
The SBTi encourages firms to reduce their Scope 1, 2, and 3 greenhouse gas emissions in line with the Paris Agreement’s warming target of 1.5 degrees. To join the Initiative, businesses must develop their own greenhouse gas emissions targets and submit them to the SBTi for review and approval. These emissions targets must be compliant with the Greenhouse Gas Protocol and the Initiative’s own requirements for ambition, timeframe, and industry-specific coverage.

We added SBTi to our model as a single Nature impact measurement within N1 - Waste and Pollution. The Initiative is one of only two frameworks we have reviewed thus far that achieve a full five points for all impact measurements. The reason for this high score to be allocated to SBTi is due to the Initiative’s detailed requirements and mandatory review process, which produces GHG emissions policies that meet all of our existing scoring criteria.

SBTi is immensely helpful for our existing N1 – Waste and Pollution indicators, explicitly linking firm-level greenhouse gas emissions with their impacts on a planetary scale. Throughout the Nature indicator categorization process, we have noted the difficulty of translating planet-level impact measurements into actionable firm-level policies. SBTi makes this possible, establishing synergistic links between individual firms’ GHG emissions policies and the Planetary Boundaries’ eight N1 - Waste and Pollution indicators, as well as with the Greenhouse Gas Protocol and the Paris Agreement itself.

NATURE	NUMBER OF IMPACT MEASUREMENTS
N1: WASTE AND POLLUTION N1-A: Carbon Neutral	1
Total Impacts for Nature	1

INTERNATIONAL SUSTAINABILITY STANDARDS BOARD (ISSB)



DISCUSSION

The ISSB was established by the IFRS Foundation during the COP26 summit to develop universal ESG reporting standards. In November 2021, it released its Prototype Climate-related Disclosures, an environmental accounting framework designed to provide financial stakeholders with comprehensive, standardized information regarding climate-related risks and opportunities.

Adding the Prototype Climate-related Disclosures to the Value Model resulted in 200 new impact measurements spread across the Nature, Firm, and Partners stakeholder categories. Accordingly, ISSB is now the largest single contributor of impact measurements to our Value Model. As a standardized environmental accounting framework, these impact measurements tended to be objectively measured, independently checkable, and measured ordinarily. However, none of the 200 measurements received points for having a goal. Much like IFC's Performance Standards, the ISSB's Disclosures are purely a reporting framework, without any goal-setting aspirations.

The ISSB's prototype standards, as integrated into our framework, provide a set of clearly defined impact measurements tailored to industries with particularly large environmental impacts, such as oil & gas, utilities, and logistics. These industry-specific measurements are very helpful for firms to precisely quantify their sustainability impacts and provided the inspiration for our 81st goal, N5-C within the Biodiversity theme, "zero palm oil use". Many of these 200 impact measurements deal with use-phase environmental impacts, which contributed 103 new lifecycle impact measurements to our Products and Services macro-indicator. One of ISSB's strongest contributions to our model is its ability to precisely quantify product impacts from raw material sourcing through end-of-life. Simultaneously, our model augments ISSB's Disclosures by defining goals, targets, and limits towards which individual ESG disclosures are oriented.

INTERNATIONAL SUSTAINABILITY STANDARDS BOARD (ISSB)



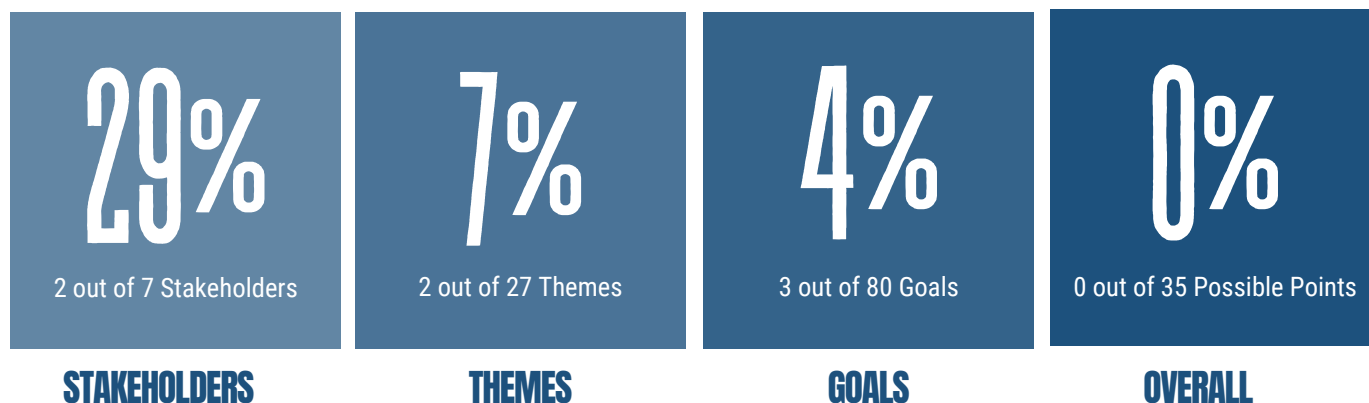
NATURE	NUMBER OF IMPACT MEASUREMENTS
N1: WASTE AND POLLUTION N1-A: Carbon Neutral N1-B: Zero Non-GHG Air Emissions N1-D: 100% Waste Reclamation and Recycling	19 1 5
N2: WATER N2-A: Water Infrastructure Interaction Strategy N2-B: Water Use Reporting N2-C: Discharge Water Quality	12 10 2
N3: ENERGY N3-A: Energy Consumption Reporting N3-B: Renewable Energy Operation N3-C: Carbon Neutral Products	6 16 9
N4: PRODUCTS AND SERVICES N4-A: Transparently Reported Product Impact N4-B: Sustainable Sourcing of Raw Material N4-C: Products with Positive Social and Environmental Impact N4-D: Efficient Packaging N4-E: Efficient Transportation	47 10 31 1 14
N5: BIODIVERSITY N5-A: Net Zero Biodiversity Impact N5-B: Humane, Compassionate Treatment of All Animals N5-C: Zero Palm Oil Use	5 1 1
N6: BUILDINGS AND LAND N6-A: Transparently Reported Building and Land Use N6-B: 100% Certified Safe and Accessible Buildings	1 2
Total Impacts for Nature	193

INTERNATIONAL SUSTAINABILITY STANDARDS BOARD (ISSB)



FIRM	NUMBER OF IMPACT MEASUREMENTS
F1: FINANCIAL REPORTING F1-B: Government Relationship	5
Total Impacts for the Firm	5
PARTNER	NUMBER OF IMPACT MEASUREMENTS
P3: RESPONSIBLE PARTNERS P3-A: Suppliers and Distributor Impact Reporting P3-B: Environmental and Social Operating Requirements	1 1
Total Impacts for Partners	2
Total Impacts added by ISSB as a whole	200





DISCUSSION

The TCFD was established by the Financial Stability Board to furnish shareholders and other financial stakeholders with climate-related information. In October 2021, TCFD released its Guidance on Metrics, Targets, and Transition Plans. Unlike IFC, ISSB, and many other environmental accounting regimes, TCFD's Guidance adopts an open-ended approach to ESG reporting. Rather than mandating disclosures with specific reporting categories and units of measure, TCFD's guidance sets seven broad reporting categories and allows firms to choose the metrics most relevant to their individual situations. TCFD provides guidance and reporting standards on what constitutes appropriate metrics but does not require verification and certification like SBTi.

We added TCFD's 2021 Guidance on Metrics, Targets, and Transition Plans to our Value Model by creating one impact measurement for each of the seven cross-industry metric categories: GHG Emissions, Transition Risks, Physical Risks, Climate-Related Opportunities, Capital Deployment, Internal Carbon Prices, and Renumeration. This resulted in five new Nature measurements and two new Firm measurements. Because of the framework's non-specificity, wherein firms are left to create their own measurements and goals, TCFD scored the lowest of our six new frameworks. None of the seven impact measurements scored any points, and the framework as a whole scored zero points.

Adding TCFD to the Value Model has been a priority due to the rapid adoption of the Task Force's reporting standards. Firms across the world, and especially in Japan, have voluntarily committed to TCFD-compliant disclosures, and the UK has mandated TCFD adoption for its largest companies. The Task Force's open-ended approach to reporting is highly compatible with our model, and our intent is for firms adopting the 81 Goals to be entirely compliant with TCFD's reporting requirements. Within our model, TCFD aligns with the ISSB prototype standards particularly strongly, with ISSB's industry-specific measurements providing a starting point for TCFD-compliant reporting. In return, TCFD contributes high-level reporting principles that contextualize our more granular impact measurements.



NATURE	NUMBER OF IMPACT MEASUREMENTS
N1: WASTE AND POLLUTION N1-A: Carbon Neutral	2
Total Impacts for Nature	2
FIRM	NUMBER OF IMPACT MEASUREMENTS
F2: GOVERNANCE F2-A: Mission Driven F2-B: Governance Reporting	4 1
Total Impacts for the Firm	5
Total Impacts added by TCFD as a whole	7

INTRODUCTION OF THE 81ST GOAL: PALM OIL

During our research efforts in the months following the publication of Valuing Value, we identified the need for a new goal related to Value for Nature focused on the elimination of palm oil use. From deforestation, habitat loss, and water pollution to greenhouse gas and particulate air emissions, palm oil's environmental impacts span several of our existing indicator classifications, and their severity merits their own dedicated goal. Accordingly, we are introducing a new goal in the Value for Nature stakeholder category devoted to reporting, reducing, and ultimately, eliminating palm oil use throughout firms' value chains within our existing Biodiversity theme (N5).

N5-C: Zero Palm Oil Use:

Policy: Organization has a written policy related to its sourcing and use of Palm Oil.

Practice Goal: Zero (0) use of Palm Oil in the organization's operations or in its supply chain.

This new goal has been adapted from ISSB's reporting standard for "Environmental and Social Impacts of Palm Oil Supply Chain", which we have integrated as impact measurement 678:

Indicator # 678

Environmental and Social Impacts of Palm Oil Supply Chain Measurement: Amount of palm oil sourced, percentage certified through the Roundtable on Sustainable Palm Oil (RSPO) supply chains as (a) Identity Preserved, (b) Segregated, (c) Mass Balance, or (d) Book & Claim.

CONCLUSION

With the inclusion of these six additional frameworks and reporting standards, not only have we nearly doubled the number of impact measurements included in our model, but in doing so, we have confirmed that our initial classification of impact measurements into stakeholders, themes and goals, as outlined in our initial white paper was both valid and reliable.

While we will continue to add additional frameworks into our Value Model, we now aim to switch our focus to the quantification of this model and its impacts, and mapping these against data that is currently reported on by businesses themselves and collected by various data providers. We continue to seek out other researchers, organizations and institutions committed to bringing transparency and rigor to the reporting of value impacts, and hope that if the contents of this white paper add value to your thinking or efforts that you will reach out and introduce yourself to our team. We continue to look for strategic partners and collaborators to amplify and enhance our efforts globally.



THE VALUE RESEARCH CENTER'S 7 - 27 - 81 MODEL

Through the collection of 703 impact measurements from more than 20 of the world's top ESG and sustainability reporting frameworks, our current model includes 7 stakeholders, 27 themes and 81 goals as outlined visually below:



Value for Employees

 <p>E1: Diversity & Equity</p>	<p>E1-A: Full-time Employment, E1-B: Ethnic Diversity, E1-C: Gender Diversity and Equity-based policy, E1-D: Broad Diversity and Representativeness of employees</p>
 <p>E2: Fair Wages</p>	<p>E2-A: Transparent Reporting on Employees, E2-B: Transparent Reporting on Wages, E2-C: Living Wage, E2-D: Pay-scale equity among different level employees</p>
 <p>E3: Health, Welfare & Safety</p>	<p>E3-A: Physical Health, E3-B: Retirement Provision, E3-C: Family/Medical Leave, E3-D: Employee Healthcare, E3-E: Occupational safety and Health Coverage, E3-F: Employee Mental health and wellbeing</p>
 <p>E4: Development</p>	<p>E4-A: Training and Education, E4-B: Performance Feedback and Review</p>
 <p>E5: Engagement</p>	<p>E5-A: Turnover, Inclusion & Engagement, E5-B: Flexible Work, E5-C: Freedom of Association, E5-D: Employee Ownership</p>
 <p>E6: Human Rights</p>	<p>E6-A: Human Rights Reporting, E6-B: Human Rights Corrective Action, E6-C: Human Rights Training</p>

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Value for Nature



N1: Waste & Pollution

- N1-A: Carbon Neutral
- N1-B: Zero non-GHG Emissions
- N1-C: Zero Plastic Pollution
- N1-D: 100% Waste Reclamation & Recycling
- N1-E: Zero Sound & Light Disturbances



N2: Water

- N2-A: Overall Water infrastructure interaction strategy
- N2-B: Water use reporting
- N2-C: Discharge water quality



N3: Energy

- N3-A: Energy Consumption Reporting
- N3-B: Renewable Energy Use
- N3-C: Carbon Neutral Products



N4: Products/Services

- N4-A: Transparently Reported Product Impact
- N4-B: Sustainable Sourcing of Raw Materials
- N4-C: Products with Positive Societal and Environmental Impact
- N4-D: Efficient Packaging
- N4-E: Efficient Transportation



N5: Biodiversity

- N5-A: Biodiversity Impact
- N5-B: Humane, Compassionate Treatment of All Animals
- N5-C: Zero Palm Oil Use




N6: Buildings & Land

- N6-A: Transparently Reported Building and Land Use
- N6-B: 100% certified safe & accessible buildings
- N6-C: 100% of new buildings are carbon neutral




Value for Society



S1: Appropriate Taxes

- S1-A: Transparent tax reporting
- S1-B: Appropriate Taxes Paid




S2: Local Community Development

- S2-A: Healthy, Safe, Resilient Community
- S2-B: Benefit-based capital spending
- S2-C: Transparent Social Reporting



S3: Local Employment and Engagement

- S3-A: Local Employment
- S3-B: Local Ownership
- S3-C: Equitable purchasing
- S3-D: Local Value Chains
- S3-E: Supporting Local Youth



S4: Charity and Volunteerism

- S4-A: Community volunteering
- S4-B: Charitable giving



Value for the Firm



F1-A: Transparent reporting on financial performance
F1-B: Government relationship




F2-A: Mission Driven
F2-B: Governance Reporting
F2-C: Board Composition
F2-D: Outside Director Ratio
F2-E: Zero Corruption



F3-A: Positive EVA (Firm)/EVA (Industry) ratio



Value for Customers




C1: Truth in communications

C1-A: Truth in Labeling
C1-B: Truth in Advertising



C2: Privacy

C2-A: Data Security
C2-B: Customer Privacy



C3: Satisfaction, Health, and Safety

C3-A: Customer Satisfaction
C3-B: Customer Health & Safety



Value for Partners

- 

P1: Supply Chain and Distribution Channel Reporting

 - P1-A: Report on Stakeholder Structure in the Supply Chain and Distribution Channel
 - P1-B: Report on Supply Chain Diversity, Equity and Inclusion
- 

P2: Supporting MSMEs and VCSEs

 - P2-A: Supporting MSMEs, VCSEs, MWOBs, and/or SDVOBs through business partnerships
 - P2-B: Supporting MSMEs, VCSEs, MWOBs, and/or SDVOBs through education and training
- 

P3: Environmentally & Socially Responsible Partners

 - P3-A: Suppliers and Distributor Impact Reporting
 - P3-B: Environmental and Social operating requirements
 - P3-C: Supply Chain Carbon Certification
- 

P4: Fair Labor Practices

 - P4-A: Audited Fair labor practices throughout supply chain and distribution channels
 - P4-B: Living wage paid by all suppliers and distributors in partner network



Value for Shareholders



SH1: Shareholder EVA

SH1-A: Positive Economic Value Added (EVA)

ABOUT THE VALUE RESEARCH CENTER

On November 1st, 2021, the Value Research Center (VRC) was officially established as an independent Research Center within Doshisha University, in Kyoto, Japan. The VRC is dedicated to measuring, monitoring, assessing, and reporting value impacts for firms and their most important stakeholders: Customers, Employees, Shareholders, Partners, Society, and Nature.

We have created and continue to develop a Value Measurement Model based on 81 goals derived from some of the world's top ESG and sustainability reporting frameworks. The goal of our efforts is to enable companies of any size, industry or location to measure and manage the value impacts that their activities have across their most important stakeholders. In June 2021, we published *Valuing Value*, our first white paper that explained this model and our methodology in detail. We are continuing to write papers for publication in leading academic and business journals, as well as beginning to produce a range of other content that will be available on our website.

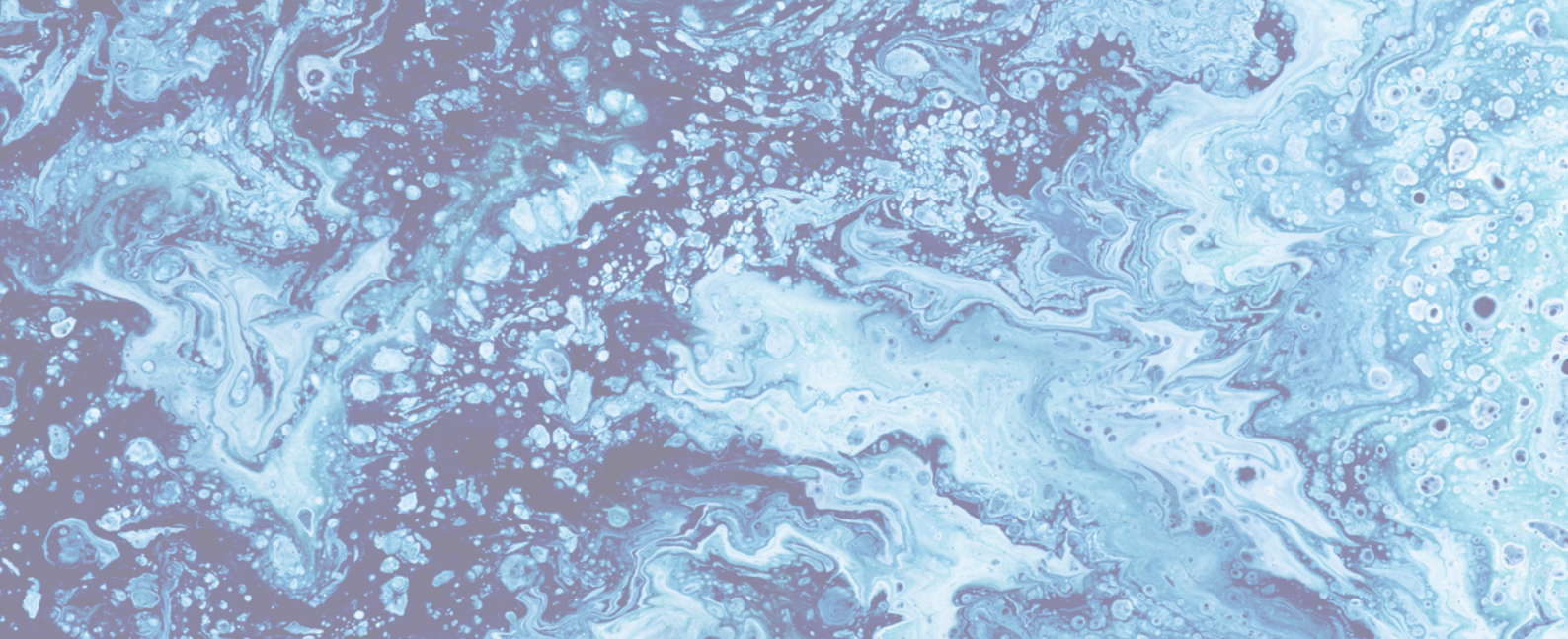
Our purpose extends beyond pure research to the active co-creation of value. We have begun to work with firms to implement the Value Model in the real world. As we assist these companies in setting and fulfilling their value-creating commitments, the feedback and insight they provide helps us to improve our model and further refine our consulting program.

As part of Doshisha University, the VRC emphasizes education, working to train both current and future leaders on best practices in value measurement and management. Doshisha Business School students and alumni serve as research assistants, developing subject matter knowledge in addition to gaining research and consulting experience. In the future, we will hold public and private training sessions, workshops, seminars, and a variety of other events.

At the heart of our efforts is our international, interdisciplinary network of professionals, both in academia and in industry, working to broaden the VRC's perspective beyond Doshisha University into the global community. This steadily growing network currently has thirty-one members including our team of research assistants, staff, and consultants. Our combined expertise allows us to incorporate concepts from marketing, accounting, finance, economics, technology, and sustainability studies into our research activities.

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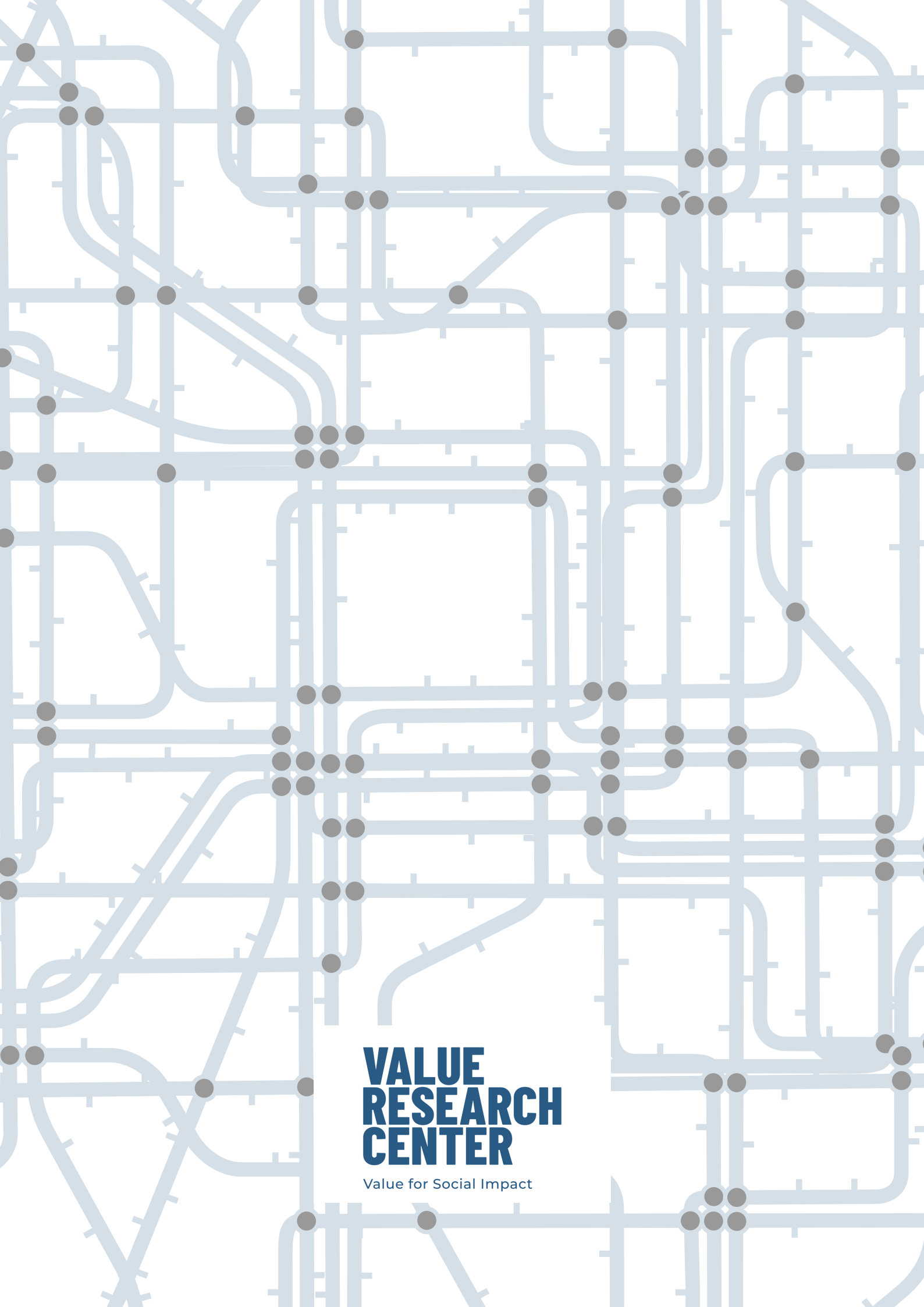
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