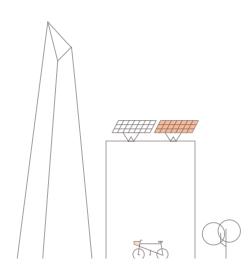


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Foreword

SustainAbility has worked with companies over several decades to build and improve their sustainability reporting efforts. Since 1998 SustainAbility has convened the Engaging Stakeholders network, which explores the corporate transparency and accountability agenda. Our work with network members has contributed to more comprehensive reporting that has built credibility and effective engagement among stakeholders. And yet we feel there is a need to do much more in this area.



Margo Mosher Manager, SustainAbility



Lorraine Smith Senior Director, SustainAbility



James Wicker Analyst, SustainAbility

While we have pushed transparency forward in some ways, we acknowledge that our guidance has also contributed to a movement of producing lengthy reports, numerous questionnaires and surveys, and a sea of data. We recognize that it is time to revisit this agenda, and to spur a reinvigorated wave of reporting and transparency that drives impacts beyond fostering credibility and stakeholder engagement. To that end, as we embarked on this research we sought to answer one question: how can transparency drive improved performance?

Our research has been informed by over 50 interviews with Engaging Stakeholders members and thought leaders, a survey of nearly 500 sustainability experts and additional desk research. Our findings highlight specific ways in which transparency can in fact inform decision-making, drive change and foster improved performance. We focus on three key elements of transparency and offer an advancement tool for implementing effective practices.

While we believe we have conducted a thorough review of current and emerging practices, given the dynamic nature of corporate transparency—in particular the technology related to capturing and sharing data, along with shifting policy and stakeholder expectations—we anticipate a continued evolution. It is a topic SustainAbility will continue to explore, and we invite feedback from you, our readers, corporate partners and other stakeholders. To share feedback please contact stakeholders@sustainability.com.

Margo Mosher Lorraine Smith James Wicker October 2014

Executive Summary

Effective corporate transparency is an important element of sustainability leadership. And yet, to date, it has largely focused on sustainability reporting, which is somewhat stalled when it comes to driving impact. Most companies are not gaining the value commensurate with the resources spent on reporting.



THE BRAZIL CONTEXT

While SustainAbility works primarily from its offices in London, New York and the San Francisco Bay Area, we were fortunate to collaborate with many partners and stakeholders worldwide in the course of this research. One such collaborator is Catavento, a Rio de Janeirobased consultancy that works with leading companies in Brazil on their sustainable development efforts.

In creating this report we realized that companies in Brazil present a particularly interesting study in the subject area of transparency, in part because the country itself is one of the most dynamic emerging economies, and further still because many companies in Brazil are addressing transparency in relatively progressive ways. Specifically, there is a greater emphasis on externalities than is the norm among most of their international peers, and there is heightened attention to a significant sustainable stock exchange, the BM&FBOVESPA in São Paulo

For these reasons, we collaborated with our colleagues at Catavento to develop the Brazilian transparency thread in greater detail than in other specific regions, and as a result, several Brazilian highlights appear throughout the report. Additionally, two of the six case studies featured highlight the transparency practices of global firms headquartered in Brazil. We see a pathway through which transparency can drive better decision-making, improve corporate performance, and ultimately compel and enable companies to create a sustainable future. We explore this pathway in greater depth throughout this report.

While non-financial reporting and transparency efforts have brought numerous benefits to companies over the past two decades, there is a tremendous opportunity to gain more strategic value and to better reap the benefits of managing, collecting and sharing sustainability data and stories.

In order for transparency to instigate change, however, we believe companies must progress efforts on three critical and interconnected transparency elements: **materiality**, **valuation of externalities** and **integration**. These three elements are the best levers available today to enable companies to significantly improve the impact of their reporting. Far beyond reporting, emphasis on and application of these three elements will help sustainability professionals gather the most critical information and use it to make more informed, strategic decisions that lead to improved business performance, including value creation in the environment, society and the economy. The elements are summarized as follows:

- Materiality: A focus on gathering and providing information on the most material issues enables companies to refine their sustainability strategy, integrate material issues into the company's larger corporate strategy and tighten reporting efforts to better communicate to stakeholders on the most critical issues.
- Externalities: Having identified the most material issues, a company can begin to measure externalities relevant to these issues. This data empowers companies to fully understand and communicate their role in creating value in the environment, society and the economy.
- Integration: Having prioritized the most strategic material issues and accounted for the externalities related to them, a company can use this information to better integrate sustainability into corporate strategy. True integration enables companies to leverage their business model for sustainable value creation.

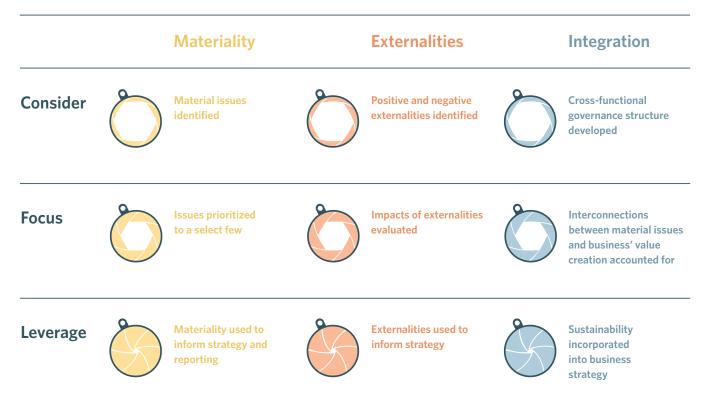
Executive Summary

To provide practical guidance in the application of these ideas, we are pleased to launch a Transparency Advancement Tool in this report. The tool illustrates how materiality supports externalities valuation, and then how those two elements in combination support the integration of sustainability information into decisionmaking and core strategy. With better decisions based on material, thorough information, the company is well-positioned to realize improved performance and positively contribute to society.

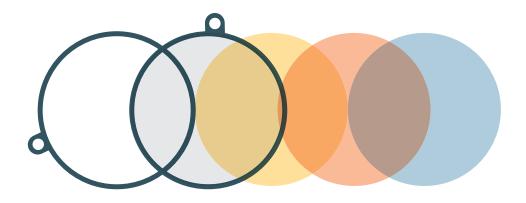
Along with this tool, which guides companies to more impactful transparency, we present the current state of activity as it relates to materiality, externalities and integration, as well as case studies of strong corporate practice. We invite companies to join us in applying transparency to bring us into a more sustainable future.

Figure 1:

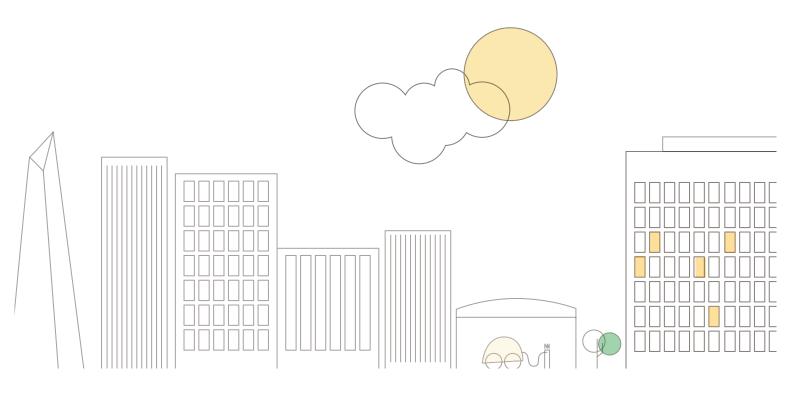
The Transparency Advancement Tool



How Transparency Drives Performance



A Closer Look at Transparency



To date, corporate transparency has been heavily oriented toward establishing and maintaining credibility. The past two decades of reporting on environmental, social and governance issues has helped companies communicate with stakeholders, increase accountability and build trust.

While these benefits have pulled the sustainability agenda forward, we believe transparency can bring more value to companies and society. We suggest that transparency must be leveraged to not only recount past performance, but to also drive future performance to more swiftly create the just and sustainable economy we need.

"Transparency drives companies to take stock of risks and opportunities and understand the world around them." Karin Ireton, Head, Group Sustainability Management, Standard Bank Why? Because information is powerful. Business stakeholders need accurate, timely and complete information to make effective decisions. These decisions go well beyond deciding if the company is credible or not. For external stakeholders they include deciding where to place capital, where to work, where to spend constrained household budgets and, ultimately, what role companies can or should play in their lives and their communities. And internally, from senior executives to supply chain managers, from product designers to those responsible for human resources, internal stakeholders must understand the impacts of their decisions—by receiving and accessing the right information in a timely way—before they can make better ones. Without transparency, unsustainable behaviors are more likely to persist and businesses may erode credibility as well as current and future value.

We do not see the challenge as how to "increase reporting," nor how to "make sure more people read sustainability reports," but rather how to ensure that transparency efforts are conducted in such a way that they drive better decisionmaking, improve performance and ultimately compel and enable companies to create a sustainable future.

Our aim with this report is to push the reporting and transparency agenda past its stalled and undervalued state. We seek to elevate the strategic role transparency plays in creating value and driving overall business performance.

Why Transparency

In 2012 we explored the topic of sustainability leadership in great depth as part of SustainAbility and GlobeScan's *Regeneration Roadmap* project. Through this project we examined the evolution of the role of business in sustainable development over the past 25 years and considered what the private sector must do to accelerate and scale progress toward a sustainable future. The project's summative report, *Changing Tack*, describes six essential attributes of corporate sustainability leadership, referred to in combination as "Extended Leadership". The attributes are defined and described in Figure 2 below.

One of the six *Extended Leadership* attributes is Transparency. Simply put, extended leaders leverage transparency to inform decision-making and drive improved environmental, social and financial performance. Instances of transparency driving performance exist in different contexts.¹ Whether it is about gathering consumer input through social media or increasing efficiency through better organization-wide energy data, companies are leveraging improved information flows to make better decisions.

Figure 2: Extended Leadership Framework¹



¹ One example of the positive relationship between transparency and performance is seen in the Carbon Disclosure Project's findings that companies reporting robust climate change information through its questionnaire generate higher profitability than industry peers, as referenced in their report, *Linking Climate Engagement to Financial Performance: An Investor's Perspective*. https://www.cdp.net/CDPResults/linking-climate-engagement-to-financial-performance.pdf

There has also been a growing global trend of regulators, stock exchanges and other investor-oriented stakeholders increasing non-financial disclosure requirements or voluntary guidance, which suggests an awakening to the opportunity transparency offers to financial markets. Two examples are the European Union's 2014 Directive that will make reporting on environmental, social and diversity issues mandatory for 6,000 companies,² and the increased momentum noted behind the Sustainability Accounting Standards Board (SASB)'s reporting guidance for companies publicly listed in the US, which seeks to include sector-based material sustainability issues in financial reporting.

"Transparency helps catalyze relationships. It feeds internal decision-makers with a more accurate market perception of the company." Carlos Alberto de Oliveira Roxo, Sustainability and Corporate Relations

Director, Fibria

We recognize that transparency alone within the sustainability context does not necessarily lead to improved performance results. Yet we also see an opportunity in taking transparency well beyond producing reports, checking boxes for stakeholder requests for disclosure, and responding to ratings and rankings.^{II} The practice of producing lengthy reports has largely stalled in a place where it brings little return to companies compared to the resources and time invested in producing the reports, and it fails to deliver sufficient value to companies and society.

We see a great opportunity for companies to better leverage transparency efforts to inform decision-making, improve strategy and support the journey toward a sustainable future. It is time for transparency to shift from being predominantly about building and protecting reputation to focus instead on creating value for both business and society.

SUSTAINABLE MARKET SIGNALS

Brazil's BM&FBOVESPA is one of the largest exchanges in the world by market capitalization. As a member of the Sustainable Stock Exchange Initiative, the exchange seeks to identify and mitigate the negative externalities of its activities in a way that is harmonious with shareholder value creation. The exchange's *Novo Valor*, the name given to its wide array of sustainability initiatives, promotes sustainable development both in BM&FBOVESPA itself, and in the capital

markets through discussions that involve sustainability in Brazil and around the world. Companies listed on the exchange must provide an additional level of non-financial information, following the "report or explain" approach.

Additionally, in April 2014 the Brazilian Central Bank began requiring all financial institutions to have a sustainability policy. Impacted financial institutions must report on progress and acknowledge the social and environmental impacts of their loans, credits and equity investments. This new inclusion of environmental, social and governance (ESG) factors in reporting and service offerings is leading to improvements in the risk assessment process of financial institutions.

ⁱⁱ The 2014 GlobeScan/SustainAbility survey on transparency and performance reveals that 79% of survey respondents indicate that corporate transparency positively impacts a company's sustainability performance. http://www.sustainability.com/library/see-change-survey

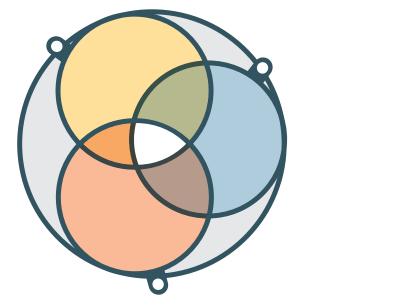
Key Definitions

CORPORATE TRANSPARENCY	We recognize that the concept of transparency is a broad one. We offer the following working definitions for the purposes of this report.				
	Corporate transparency is the act of a company providing information, or mal information available, to relevant stakeholders.				
	<u>Effective</u> corporate transparency is when a company provides or makes available appropriate and timely information to all relevant stakeholders with the intention of <u>optimizing decision-making</u> that leads to more sustainable ⁱⁱⁱ outcomes.				
	Corporate transparency may have different characteristics, and this variety was considered in the scope of the research. For example, a transparency initiative may be:				
	 Aimed at different audiences—internal (employees, management, etc.) or external (investors, customers, suppliers, NGOs, communities, consumers, regulators, trade unions, etc.); 				
	 Carried out in different formats: online or printed reports, messages pushed out through social media, live webcams in factories, quarterly investor calls, traceability tools, certification and labeling, etc.; 				
	 Direct or indirect—initiated by the company (e.g. a company-produced report) versus by a third party to which the company then responds (e.g. a company's response to the Carbon Disclosure Project's survey). 				
TRANSPARENCY BEYOND REPORTING	Transparency in this context is far beyond sustainability reporting. While we consider reporting an important element of corporate transparency, publishing a stand-alone report is only one of a wider array of ways in which transparency can				

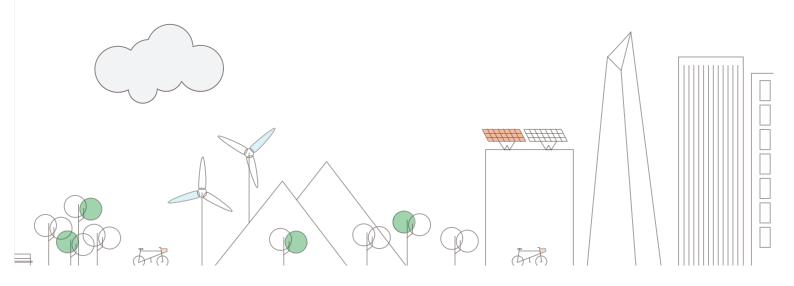
consider reporting an important element of corporate transparency, publishing a stand-alone report is only one of a wider array of ways in which transparency can be applied. And while reporting has received great attention, we see an opportunity to realign companies' transparency efforts to gain the greatest value and to move more rapidly toward a sustainable economy. We do not expect sustainability reporting to disappear any time soon, however we do anticipate and encourage companies to build on what we have learned to create a more effective approach to communicating sustainability-related information in the years to come. We explore such opportunities throughout this report.

ⁱⁱⁱ By "sustainable" we include social, environmental and financial impacts and suggest that a truly sustainable outcome is one that meets the needs of the present without undermining those of the future.

How Transparency Drives Performance



In Sight: Three Elements to Progress



In Sight: Three Elements to Progress

When we engaged with our stakeholders and other experts to discover what could be done to drive increased value from transparency-related activities, we heard clearly how three distinct elements—materiality, valuing externalities and integrated thinking—are essential to getting transparency right.

These three elements address some of the barriers we heard throughout our research, from lack of focus on material issues to poor data accuracy, from conflicting reporting frameworks to an unclear business case for transparency.^{iv} We briefly outline these observations in this section and then provide greater detail on each of the three elements in the sections that follow.

- Materiality: A focus on gathering and providing information on the most material issues enables companies to refine their sustainability strategy, integrate material issues into the company's larger corporate strategy and tighten reporting efforts to better communicate to stakeholders on the most critical issues. An evolved approach to materiality that considers sector-specific guidance ensures that the most critical range of issues—social, environmental and financial—are being measured and managed by senior leadership and decision-makers across the business.
- Externalities: Having identified the most material issues, a company can begin to measure externalities relevant to these issues. This more robust data can be used to inform internal stakeholders on these material issues so that decisionmaking is improved; it can also be shared with relevant external stakeholders to reduce negative externalities and/or increase positive ones. Valuation of externalities empowers companies to fully understand and communicate their role in creating social, environmental and economic value.
- Integration: Having prioritized the most strategic material issues and accounted for the externalities related to them, a company can use this information to better integrate sustainability into corporate strategy. True integration enables companies to concisely understand internally, and communicate externally, their business model and approach to value creation to key stakeholders, and to better manage performance on these critical issues over the long term.



^{iv} The 2014 GlobeScan/SustainAbility survey on transparency and performance highlights an array of barriers to transparency effectively driving change. http://www. sustainability.com/library/see-change-survey

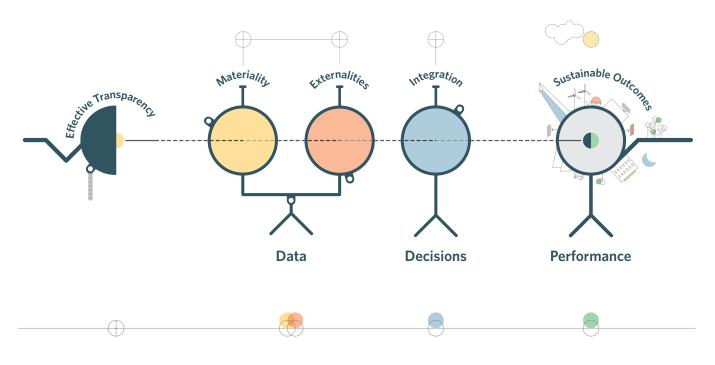
In Sight: Three Elements to Progress

We see these three elements in transparency as interrelated, and as the essential foundations to ensure the effective flow of relevant data to inform decisions so that performance is improved, as illustrated in Figure 3 below.

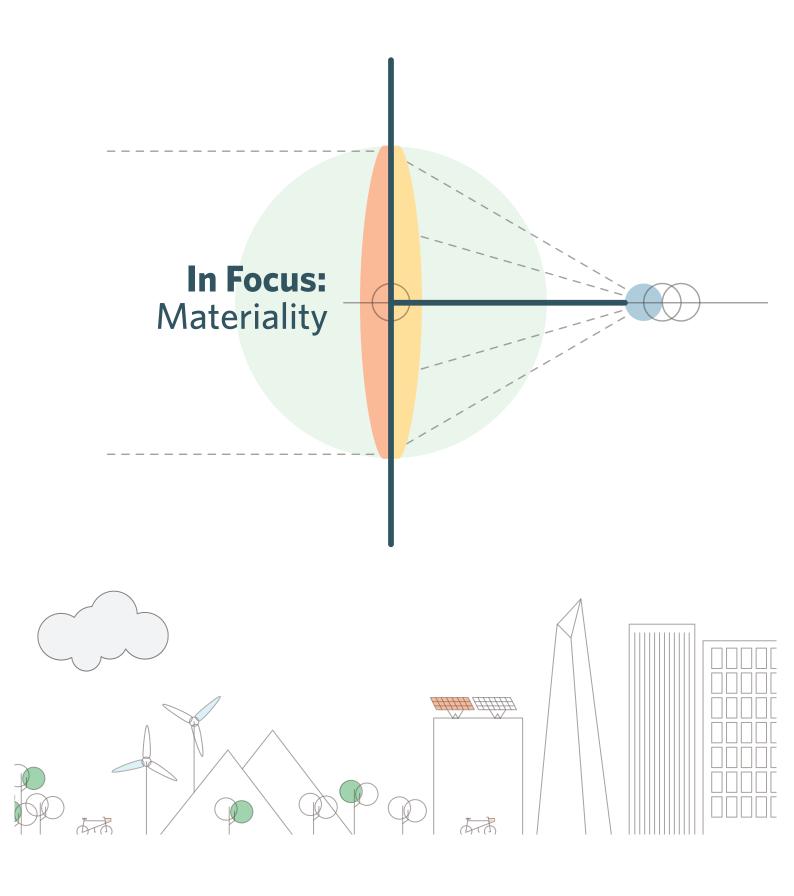
The Transparency Advancement Tool presented in Figure 1 guides companies toward improved transparency in these three elements and is explained in more detail throughout the report.

Figure 3:

Three Transparency Elements to Drive Performance



By identifying its most material issues, a company can narrow the externalities explored and the relevant data and information shared. This data and information can then be leveraged to inform decision-making in an integrated way in the areas of the business where the material issues are most relevant. With better decisions based on better information, the company is well-positioned to realize improved performance and sustainable value creation. How Transparency Drives Performance



The amount of sustainability information being gathered and shared, predominantly through externally published reports, has increased dramatically in the last two decades. Yet there is a disconnect between how much companies report externally and what information is actually useful.

"Critical data about Chipotle's business like information about our supply chain and the ingredients we prepare and serve to our customers—must be updated on an ongoing basis and immediately accessible to our senior leadership at all times." Josh Brau, Program Manager, Food with Integrity, Chipotle Companies can now collect and publish vast quantities of information about their activities including the environmental and social impacts of suppliers, customers, consumers and direct operations. While this has generally meant an increase in transparency, it has also led to lengthy, costly and minimally read reports whose very length may inadvertently obscure important information for external stakeholders. It has also meant keeping the corporate stewards of this information so busy managing reporting commitments that they are often not able to put the information to more strategic use.

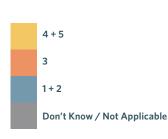
Enter: materiality. Done well, this process of identifying and prioritizing the most important issues to a business and its stakeholders guides companies to gather only the most strategic information, shaping more concise, effective reports and offering the potential to better inform strategy. Materiality seeks to take an objective, honest look at issues the company may not yet have fully incorporated into its planning hence bringing it one step closer to true integration. Our research indicates that increased focus on the most material issues would improve the likelihood that transparency drives sustainable, positive change within companies (see Figure 4).

This chapter will explore the current state of materiality, challenges to existing approaches, guidance on a strategic approach to materiality and case studies of strong practice in materiality. It will also explore SustainAbility's Transparency Advancement Tool to address and advance the degree to which a company applies materiality.

Figure 4:

Barriers to Transparency³

To what degree do the following forms of transparency guide decision-making and cause sustainable change within companies? Please use the 5-point scale provided, where 1 is "not at all" and 5 is "a great deal".



Poor data accuracy Lack of focus on material issues Comparability of data Lack of mandatory transparency requirements Complexity of reporting frameworks Lack of external interest or uptake Designed for too many different types of stakeholders Risks related to transparency Financial/resource pressure Too much data

70			20		2
65		24	4	7	4
64		2	7	7	2
63		22		13	2
57		28		12	3
55		24		18	3
53		31		14	2
52	22	2	2	3	3
46	32		19		3
41	31		25	5	3

Percentage of surveyed experts

The Current State

A dynamic and much discussed topic, materiality has been a focus of many conference sessions, blog posts and analysis. The fervor is driven by both frustration and promise: frustration from conflicting reporting guidance and the challenge of pouring resources into a process that has had limited impact; promise from the opportunity for materiality to be a powerful strategic tool and an effective input to ever-challenging communications with investors and other stakeholders on sustainability issues.

The most prominent sustainability reporting organizations offer different guidance on materiality.⁴ Sustainability definitions of materiality also differ from financial definitions of materiality, leading to poor alignment between some of the focal points in corporate strategy and sustainability strategy.

The **Global Reporting Initiative** (GRI) G4 reporting framework, released in May 2013, guides companies to begin the entire reporting process with materiality, to first identify the most relevant topics to report on, and to structure their reporting and strategic decisions to align with these topics. GRI provides guidance on the process of materiality that involves engaging external stakeholders, assessing issues throughout the value chain and using a matrix to guide the process.

Information is material if it may reasonably be considered important for reflecting the organization's economic, environmental and social impacts, or influencing the decisions of stakeholders.

GRI definition of materiality

With the late 2013 release of its draft framework, the **International Integrated Reporting Council** (IIRC) has brought increased attention to the way material issues impact a company's value creation, short-, medium- and long-term impacts of the issues, and how investors view these issues. The IIRC's guidance emphasizes the importance of assessing the magnitude and likelihood of occurrence and suggests reporters link the materiality process with management processes.

A matter is material if it is of such relevance and importance that it could substantively influence the assessments of providers of financial capital with regard to the organization's ability to create value over the short-, mediumand long-term.

IIRC definition of materiality



The Sustainability Accounting Standards Board (SASB) is in the process of releasing KPI-based materiality reporting standards for companies publicly listed in the US in 80 industries within 10 sectors. It bases its identification of material issues on the US Securities and Exchange Commission (SEC)'s definition of materiality. While SASB does not take a specific position as to how this guidance affects the rest of a company's report, it aspires to make it a legal requirement that companies disclose their material issues in their financial reporting. If approved by the SEC,^v these new regulations would apply to nearly 12,000 public companies.⁵

Information is material if it presents a substantial likelihood that the disclosure of the omitted fact would have been viewed by a reasonable investor as having substantially altered the total mix of information made available.

SASB and financial definition of materiality. as determined by the US Supreme Court case TSC Industries, Inc. versus Northway, Inc. 426 US 438 (1976).

While both financial and sustainability materiality involve identifying the most important issues, they differ in their audience and approach (see additional definitions, pages 16/17). Financial materiality identifies issues of concern to investors while sustainability materiality, depending on the definition, broadens the scope to consider important issues for all stakeholders. Financial and sustainability materiality are both qualitative in nature, although financial materiality has more quantitative implications. Auditors have created rules of thumb for determining whether an issue is financially material or not, such as having a potential financial impact of 5% of earnings before income taxes or 10% of a given account balance.⁶

Each of these organizations provides a valuable framing of materiality that has been informed by numerous and diverse stakeholders, each with the intent of driving the transparency agenda forward to support a more sustainable economy. However, these different approaches leave companies with the challenge of deciding how to go about identifying material issues.⁷



* At the time of publication it is unclear if SASB's efforts will be adopted by the SEC. However, SASB has gained internal expertise and external clout with the arrival of former SEC chair Mary Schapiro as Vice Chair and Michael Bloomberg as Chair.

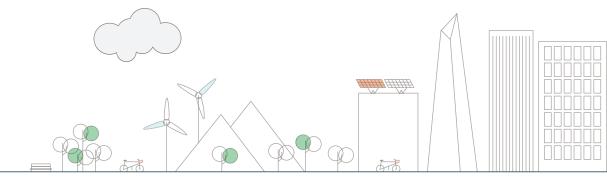
"Materiality can be improved not only in terms of consistency and clarity in how issues are defined and evaluated, but also in socializing outcomes and integrating them as part of a broader business strategy after the assessment is done." Jasper Jung, Sustainability, General Motors

Challenges & Opportunities

This varied guidance leads to a number of barriers standing in the way of materiality bringing more value to companies through their transparency efforts. Some of the challenges that the current approaches to materiality present include:

- Resource-intensive processes with outputs of lengthy lists of material issues (which, ironically, do little to focus corporate attention)
- Processes focused on defining report content rather than driving strategy^{vi}
- Lack of alignment with financially material issues^{vii}
- Limited scope leading to missed or under-explored issues
- Internal priorities and politics biasing issue prioritization

Some of these barriers will call for longer-term solutions, requiring new policies, regulations and market-based shifts. Yet the impact that understanding materiality can have on a company is a promising one—promising enough to make it worthwhile for companies to proactively strive to overcome these barriers.



^{vi} Harvard Business School professor Bob Eccles recently assessed 91 companies' materiality matrices for his soon-to-be published book, *The Integrated Reporting Movement*. Eccles found that most companies did not make it clear how the materiality matrix connects to the report, and were similarly unclear about how materiality drives strategy and decision-making.

In The Integrated Reporting Movement, Bob Eccles cites an analysis of materiality conducted by consulting firm Framework. Framework analyzed Corporate Responsibility Magazine's 2011 100 Best Corporate Citizens List and reviewed the extent to which there was consistency between a company's sustainability reporting on material issues and issues described in its Form 10-K. They found that of the 100 companies, eight aligned to a significant degree, 28 were somewhat aligned, and the majority was minimally or not at all aligned.

The Future: Toward One Materiality

In the long-term, we see a future where there is just one materiality—i.e., one list of financially, environmentally and socially material issues that inform company strategy and decision-making. The IIRC's use of an investor-focused definition of materiality and SASB's direct use of the SEC's definition are shifting transparency in this direction. Right now, however, if we were to use only the financial definition of materiality, which focuses almost solely on the interests of investors, we risk de-prioritizing critical issues that investors have not yet put clearly in their purview, and which will very likely have a long-term impact on the company's overall performance, whether investors take this into account yet or not. Until we reach a one materiality state, we recommend that companies take a robust approach to incorporating sustainability-related material issues into corporate strategy and to their internal and external transparency efforts.

"For a company early on in the integration journey, they must start by drawing connections between materiality and strategic planning." Mark Gough, Head of Sustainability, The Crown Estate

COMMUNITY & INVESTOR ENGAGEMENT ON MATERIAL ISSUES

Through an extensive and ongoing materiality review process, Light, a Brazilian utility company, determined that two of its most material issues are energy loss/theft (due to the socio-economic and infrastructure challenges of the millions who live in the slums in its main market, Rio de Janeiro); and energy efficiency (exacerbated by low consumer awareness, among other challenges).

The company has invested in simplifying the language used to connect to customers, and has added YouTube videos, short texts and advice on energy bills as a means to influence energy consumption patterns.8

Beyond these communication tactics, Light's approach to materiality has also had a direct effect on the company's stakeholder engagement, driving very active, challenging and yet successful efforts to work within low-income communities to ensure safe, adequate electricity for slum dwellers, while also improving the company's performance.9 One part of the stakeholder engagement work includes site visits with investors. Light's approach to materiality has also positively influenced its relationship with the energy regulator and the investment community.

"The investor relationship—the investment strategy—is really about our business model. Non-technical losses are a key factor to the valuation of Light, and this is why we engage with investors through site visits so they have a proper understanding of our specific model to address energy losses. We go beyond transparency in our financial filings and reports to ensure that they really understand our approach to this material issue."

- João Zolini, CFO and Investor Relations **Director, Light**

Applying the Transparency Advancement Tool

To better leverage materiality as a strategic tool, we recommend that a company **consider**, **focus on** and **leverage** information about material issues. This guidance has been developed based on our work with clients, our review of the current state of materiality and our analysis of what is needed for materiality to bring more value to the internal and external transparency efforts of companies.



Consider

Identify potential material issues, link them to the business model and operations and explain the approach taken

- Ensure a solid understanding of the business by reviewing the business model, financial performance and value chain. Review key macro and sector trends such as new and emerging market needs, regulatory changes, resource constraints and other significant current or expected impacts on the business.
- Identify approximately 15-25 material issues using the following inputs:
 - Issues and indicators included in GRI sector supplements, SASB guidance and other sector-specific resources;
 - Research and expertise from NGO, government, think tank and academic reports;
 - Assessment of peer company material issues;
 - Assessment of key stakeholder inputs, e.g., investor dialogue, shareholder activism, raters and rankers, and relevant media reports.

Focus

Prioritize the initial list of issues to a select few that are most material to the business and its stakeholders

- Map the issues against the company's value chain to identify boundaries and areas of greatest impact for each issue;
- Summarize and assess business risks and opportunities for each issue;
- Identify a shortened list of strategic material issues through select interviews with key internal and external stakeholders.

Leverage

Use materiality to inform strategy and reporting efforts by engaging risk management and corporate strategy teams on most material issues

- Socialize the issues and approach internally;
- Integrate the material issues into the larger corporate strategy and illustrate links to the business model and operations;
- Engage risk management and corporate strategy teams, and other relevant areas
 of the business such as product R&D, HR, marketing and investor relations;
- Use material issues to structure concise reporting and communications about the business and its value creation in order to engage stakeholders on the most critical issues.

By implementing this approach to materiality, companies are positioned to leverage the full value from materiality, using it to inform strategic focus and concise reporting efforts.

Case Study: Fibria



Fibria is a Brazilian forest products company and the world's largest producer of hardwood eucalyptus pulp. The company owns and manages over 800,000 hectares of forests and processes the wood into pulp, which it exports to over 40 countries as a raw material for personal hygiene products and specialty paper. The company has taken a robust approach to materiality and recently conducted a materiality refresh, narrowing its longer list of issues to enable the company to focus on ten strategic issues. Fibria's approach incorporated internal and external stakeholder perspectives gathered through interviews and surveys, and also leveraged expert research from the World Wildlife Fund (WWF) and the Forest Stewardship Council (FSC). The resulting list of ten material issue areas has guided Fibria's long-term target setting and informed the structure of its 2013 sustainability report.¹⁰

Transparency in Action: Materiality, Corporat Strategy & Successfu

Fibria has worked to better understand how its ten most material issues fit into its business model and affect the company's value creation. Through the use of a thorough, albeit complex, infographic, Fibria illustrates the positive and negative impacts of each material issue, which stakeholders are affected, relevant targets and performance to date. By illustrating its positive and negative impacts, Fibria has begun to investigate the externalities associated with each of its material issues. This approach to materiality has enabled the company to integrate its most strategic material issues into the overall business strategy.

Fibria's effective prioritization and management of two material issues in particular—community impacts and certifications—have been critical to the business' success and enabled the company to move past previous challenges in these areas, improving its market position and sustainability impacts. Before Fibria was created, one of its predecessors, Aracruz, struggled to effectively manage community relations, experiencing regular timber theft, road blockages and risk of lower productivity of mill operations due to its antagonistic community relationships. The need for positive community relationships, verified through thirdparty certification, became clear. When Fibria was founded, in 2009, it worked to prioritize these issues and build them into its strategy.

Citing communities as a material issue goes far beyond strategic philanthropy and ensures the issues are addressed at a business model level. As such, Fibria has rebuilt trust among key stakeholders by launching programs that bring meaningful value to community members while strengthening the business. For example, the Rural Territory Development Program (PDRT) empowers communities to manage agro-forestry projects (e.g., the cultivation of watermelons, maize, beans and cassava, as well as cattle raising and bee-keeping) in the areas directly bordering or overlapping with Fibria's owned and managed forests.

Fibria effectively takes material issues into consideration when making decisions about the company. The material issue of community relationships is inextricably linked to the company's ability to grow. Identifying and internalizing the key issues affecting communities is critical to Fibria's success." **Carlos Alberto de Oliveira Roxo,**

Sustainability and Corporate Relations Director, Fibria

It is expected that these projects will become economically self-sustaining within five to six years. In just one area where the PDRT is being implemented, 1,062 families have engaged in the program and experienced a 44% average monthly increase in income due to the program. For the company, illegal charcoal production and wood theft have also been reduced (from 320,000 cubic meters in 2010 to 18,000 cubic meters in 2013) and its corporate reputation has dramatically improved, with 72% of community members responding favorably to rating questionnaires in 2013, helping Fibria secure license to operate in the years ahead.

The success of Fibria's prioritization of community impacts has also enabled the company to effectively manage another material issue, certifications, as positive community engagement is a critical requirement for certification. As Maurício Voivodic, Executive Secretary of the Imaflora certifying organization notes, "Forest certification is a condition of existence, and not a competitive strategy. The challenge for companies like Fibria is to have consistent medium- and long-term sustainability actions that are part of the scope of certification."¹¹ Fibria's work to positively impact communities has helped the company meet requirements for certifications, addressing two strategic material issues in an integrated and successful way. As of 2013, Fibria gained certification for 100% of its forestry operations (FSC and the Cerflor/PEFC).

The Future: Transparency as Par of Business Model

While Fibria acknowledges that there is still significant work to be done, the company's prioritization of a limited number of issues and its closer look at the externalities, targets and performance related to each issue has enabled the company to effectively allocate resources and make meaningful progress. The positive financial results and strengthened market position suggest the approach is paying dividends for Fibria and its stakeholders.

Case Study: PG&E



Transparency In Action: Materiality to Inform Strategy

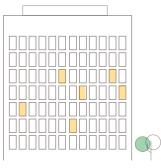
"For us, the materiality assessment process was almost as important as the results. It was not a check-box exercise, but a really valuable engagement opportunity. It served as a vehicle to engage colleagues across our company as well as key external stakeholders sparking conversations and reinforcing the link between sustainability and our core business operations." Christopher Benjamin, **Director, Corporate** Sustainability, PG&E

Pacific Gas and Electric Company (PG&E) is one of the largest natural gas and electric utilities in the US. Based in San Francisco, PG&E provides natural gas and electric service to approximately 16 million people throughout a 70,000-squaremile service area in Northern and Central California.¹² PG&E conducted a materiality assessment in 2013 to inform its corporate strategy, guide effective management of issues and shape its sustainability reporting and stakeholder engagement.

To identify its most material issues, PG&E worked with SustainAbility to conduct nearly 40 interviews with key internal and external stakeholders, review expert research and peer company commentary on material issues and assess relevant sector trends. PG&E identified 18 issues that are material to the long-term sustainability of its business and mapped them on a matrix to use as an internal and external communication and engagement tool. As a key step in a structured process, the matrix was shared with, and verified by, PG&E's Utility Strategy Committee, a group of senior company leaders. This checkpoint confirmed the results of the matrix and provided a unique opportunity for the corporate sustainability team to facilitate dialogue on business opportunities and risks.

A key success factor was the early engagement of the corporate strategy team. This collaboration—which extended throughout the project—enabled the results of the materiality assessment to directly inform the company's strategic planning process. For example, while PG&E had long been managing water use and implementing water stewardship efforts, the issue was not centrally governed in the company's organizational structure. The materiality assessment increased PG&E's focus on water, and the company has since developed robust management plans related to water conservation and management. This included establishing a Drought Task Force, a cross-functional group working to increase PG&E's engagement and attention on the issue in light of statewide drought conditions. More broadly, extensive internal engagement throughout the materiality assessment process also positioned the corporate sustainability team to gain buy-in and increase the business value of the results.







Another process that helped integrate the findings into corporate strategy was identifying relationships between issues. The materiality matrix illustrates not only the importance of the issues to the business and its stakeholders but also draws interconnections between issues, which serve to identify key leverage points. For example, PG&E may have limited ability to address one issue, while it may have more leverage over other issues that are linked to it. This interconnectivity provided insight into how PG&E might approach issues in a more integrated way.

Transparency in Action: Materiality to Inform Reporting

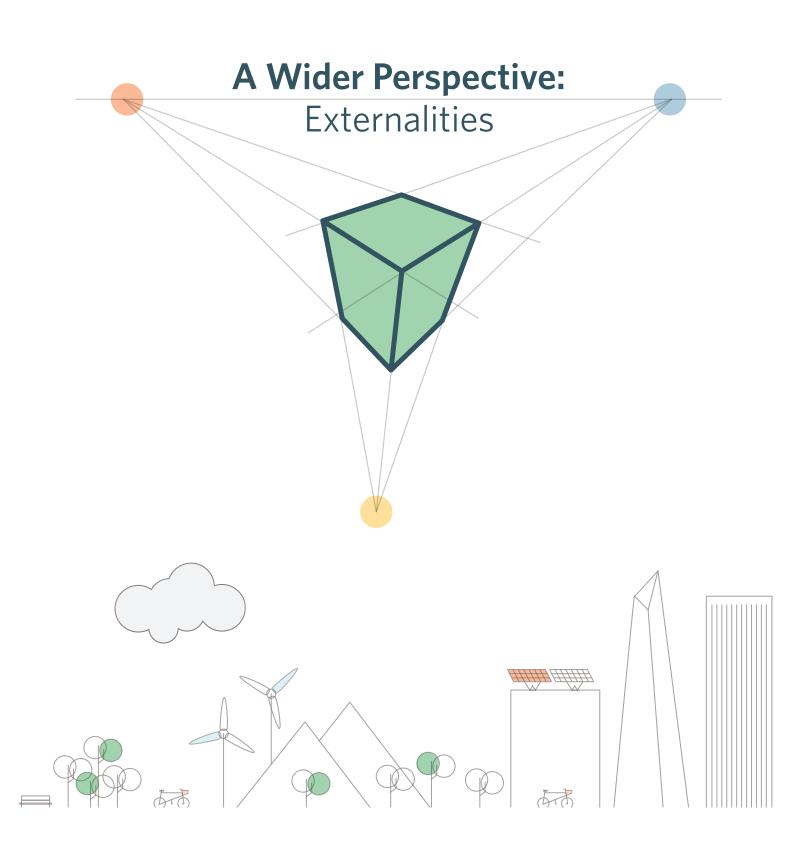
PG&E has also used its materiality assessment to inform the content, structure and emphasis of its reporting. Its 2014 report is organized according to material issues, and the narrative emphasizes how these issues are managed and measured. The matrix diagram is used to orient the reader as to which material issues are discussed in which section. PG&E also uses an interactive matrix on its website, allowing the user to click on issues and view the interconnections and definitions of the issues.

The Future:

Refreshing Materiality & Sector Leadership PG&E is continuing to refine its approach. In Fall 2014, it will undertake a refresh and validation phase of its materiality matrix to scan for emerging issues and to better understand stakeholders' perspectives on its performance. The company has also continued to work with industry groups such as the Electric Power Research Institute in order to progress materiality within its sector and to encourage peer companies to leverage materiality to inform strategic decision-making.



How Transparency Drives Performance



Once a company has identified and prioritized its material issues, it can then more fully understand, account for and communicate its impacts on society and the environment. However, many of the impacts fall outside the four walls of a company's direct operations and are considered externalities.

> Despite a heavy dependence on society and the environment for things such as access to fresh water, clean air, pollination and thriving communities, to date companies have not yet had to formally recognize—much less account for externalities. Our expert survey data suggests that the valuation of externalities is a strategic way for companies to collect and report on information that can inform decision-making, lead to improved performance, and transition businesses so that they thrive within environmental limits.^{viii}

Externalities refer to situations when the effect of production or consumption of goods and services imposes costs or benefits on others, which are not reflected in the prices charged for the goods and services being provided.

Organisation for Economic Co-operation and Development definition

Valuing externalities is intended to identify costs and benefits beyond a company's direct operations. This could include, for example, improving risk management and supply chain resilience by addressing negative externalities, or emphasizing the positive impact a company has in the community.

Figure 5:

Different Forms of Transparency Drive Decision-Making¹³

To what degree do the following forms of transparency guide decision-making and cause sustainable change within companies? Please use the 5-point scale provided, where 1 is "not at all" and 5 is "a great deal".



65		2	24		4
61		26		10	2
60 25			11	4	
48		34		13	5
41	36		1	9	4
37	33	33			5
32	35		30		3

Percentage of surveyed experts

Viii GlobeScan/SustainAbility 2014 survey data indicates that 65% of experts see valuation and reporting on externalities as a form of transparency that will guide decision-making and cause sustainable change. http://www.sustainability.com/library/see-change-survey

Valuation / reporting on externalities

Sustainability reporting



We recognize that suddenly putting a price tag on every element of society and the environment is neither practical nor necessarily even desirable. As journalist George Monbiot points out, applying the same economic approach to solving the problem as the one that created it is a "road to ruin".¹⁴ And in many cases there is little or no direct incentive in place today to address a given externality, yet there is a growing sense that we are reaching a tipping point where some of these issues will carry real costs that will need to be internalized. We see this kind of valuation as a way to acknowledge impacts in a market that currently fails to fully account for them, and we note an emerging array of initiatives and tools seeking to address the opportunity presented by valuing externalities.

This chapter will explore the current activity in this emerging area and present a range of challenges, opportunities and case studies illustrating how some companies are effectively addressing externalities to improve performance. It will also offer guidance on the application of SustainAbility's Transparency Advancement Tool to assess and advance progress in understanding a company's externalities.

The Current State

Four Converging Drivers Of Valuing Externalities

There are four drivers creating increased activity around valuing externalities: resource scarcity, increased stakeholder expectations, emerging valuation tools and accelerating corporate leadership. We see these drivers converging more rapidly on some industries than others. Spanning these four drivers is a growing need to translate sustainability into financial terms in order to communicate its value to both internal and external stakeholders.

1. Resource Scarcity

Recognition of resource scarcity is forcing companies to take note of the resources on which they most depend and to take steps to increase efficiency and secure stable supplies. As companies recognize which resources they are directly or indirectly dependent upon, they need to understand the resource's value to the business. This information provides businesses with clarity around their impacts on resources.

"Positive and negative social and environmental externalities need to be considered to allow integrated decisions. It is not until the company takes these externalities into account that Natura's reporting initiatives can also be effectively integrated." Denise Alves, Sustainability Director, Natura



2. Increased Stakeholder Expectations

From shareholder resolutions on climate change to growing media commentary on the need for business to support a living wage, there are signs of increased expectations of a company's unintended responsibilities. In some cases stakeholders are quite literally demanding that companies account for, and be held accountable for, their impacts including those on externalities, requesting that they disclose non-financial information pertaining to them. A more thorough accounting of externalities would at least begin to offer responses to these stakeholder demands.

3. Emerging Frameworks

Reporting stakeholders such as the IIRC and SASB explicitly encourage companies to take externalities into account. The IIRC Framework guides companies to measure their value beyond financial capital and advocates for the importance of considering externalities in order to inform investors. "Externalities may ultimately increase or decrease value created for the organization; therefore, providers of financial capital need information about material externalities to assess their effects and allocate resources accordingly."¹⁵ SASB identifies 'Accounting for Externalities' as a material issue within the category of business model innovation.¹⁶

4. Accelerating Corporate Leadership

There have been several key developments in recent years where companies have stepped forward to indicate their intention to value specific externalities. This has served to direct further attention to the idea and to generate a certain degree of buzz and peer pressure, which in turn has created additional momentum.

For example, at the Rio +20 Summit in 2012, 37 CEOs of financial institutions signed the Natural Capital Declaration (NCD), an initiative designed to integrate natural capital^{ix} considerations into loans, equity, fixed income and insurance products, as well as in accounting and reporting frameworks. Signatories, which include the likes of Calvert Investments, Rabobank Group, Royal Bank of Scotland, Standard Chartered and Sovereign, are working to develop metrics and tools to help incorporate natural capital factors into their businesses.

Individual companies are also stepping forward, such as PUMA with its release of the world's first ever environmental profit and loss account (EP&L) in 2011, which suggests that this kind of valuation is not just a future possibility but an emerging reality.¹⁷ Since then, several other companies have followed suit, from financial institutions to pharmaceutical businesses, creating their own internal EP&Ls.

^{ix} The Natural Capital Declaration defines natural capital as "the Earth's natural assets (soil, air, water, flora and fauna), and the ecosystem services resulting from them, which make human life possible."



Natural Capital Valuation On The Rise

The most recent buzz around externalities has been heavily focused on the valuation of, and reporting on, natural capital. Natural resource scarcity has driven some companies to begin accounting for natural capital, especially those with high direct dependencies on natural resources such as forestry, agriculture, mining and energy companies. While the valuation of natural capital is still very much emerging (and controversial), we note this as a growing trend, with at least 47 companies globally mentioning natural capital or ecosystem services in their reporting and public communications in 2014, a dozen more than documented in 2013.¹⁸ Coalitions are forming and experts are developing tools and methodologies, further enabling companies to conduct this kind of valuation.

Emerging Collaborations Generating Momentum

Recognizing that most companies are neither incentivized nor able to effectively value natural capital-related externalities in isolation, multiple organizations have formed to bring credibility, resources and momentum to the effort. The following are several prominent and interrelated initiatives coalescing around this need:

- The World Bank heads Wealth Accounting and the Valuation of Ecosystem Services (WAVES), "a global partnership that aims to promote sustainable development by ensuring that natural resources are mainstreamed in development planning and national economic accounts."
- The Natural Capital Coalition (NCC), formerly the The Economics of Ecosystems and Biodiversity (TEEB) for Business Coalition, is a global, multi-stakeholder group actively working to develop a harmonized framework, the Natural Capital Protocol, for natural capital accounting. Founding members include the GRI, The World Bank, the Institute of Chartered Accountants in England and Wales, UNEP, IFC and WBCSD.
- National governments are also establishing groups to implement natural capital accounting, such as the UK's Natural Capital Committee, an independent advisory body set up to integrate accounting for natural capital into the UK economy.



NATURA APPLIES RADICAL TRANSPARENCY TO PRODUCTS

Natura launched its *Radical Transparency* initiative in 2013 to improve the accessibility of its product information, with the long-term objective to influence consumer choices by educating them about the sustainability impacts of its products. This traceability initiative addresses externalities such as the environmental impacts of sourcing certain ingredients from the Amazon. As part of this effort, Natura launched an online platform, *Co-creating Natura*, where consumers, Natura consultants and employees engage one another directly to share information. The first year of the project was dedicated to data collection shared through the site, which has informed priorities for further transparency in the value chain, including environmental and social impacts as well as health and safety information. The next step will include creating an action plan to ensure that consumers have increased access to the information to build on the company's theme of *Radical Transparency*. "The Radical Transparency project aims to add information to Natura's products, to raise awareness among Natura's customers with regard to the product's origin and its social and environmental impacts. We believe consumers will value this attitude in the future and reward Natura by buying our products."

- Denise Alves Sustainability Director, Natura



New Methodologies & Tools Offer Early-Stage Solutions

Often when we speak with corporate colleagues about the concept of valuing externalities, we are confronted with these questions: "What does that actually mean? And how would we do it?" While it is a sizeable challenge with a long way to go, several organizations have made great headway in putting tools and resources together that companies can use. For example:

- The Natural Capital Project (NatCap) aims to integrate the value of nature into all major decisions affecting the environment and human well-being using science-based software tools that quantify, map and value services provided by nature. NatCap has launched InVEST (Integrated Valuation of Environmental Services and Tradeoffs), an open source software suite that enables users to quantify natural capital, visualize the benefits and assess tradeoffs. NatCap is working with the Earth Genome Project to scale its tools.
- Early work to develop an internationally accepted accounting methodology is seen in the System for Environmental and Economic Accounts that the UN Statistical Commission adopted in 2012. This system provides a method to account for some forms of natural capital such as minerals, timber and fisheries.
- Private firms are developing methodologies to help companies account for externalities. For example, Trucost has developed a Natural Capital Analyzer tool and service offering to assess the environmental impacts of their suppliers, as well as a Natural Capital Leaders Index, which assesses the degree to which companies have decoupled their economic growth and environmental impacts. Another consultancy, GIST Advisory, has developed an approach to measure a company's human, social and natural capital externalities.

"We're in early days and we should be trying different methodological approaches and working this into the day-today business context before we try to have the approaches converge." **Glenn Prickett, Chief External Affairs Officer, The Nature Conservancy**



Shadow pricing is another way of valuing externalities. GreenBiz's *State of Green Business 2014* report defines a shadow price as "the estimated price of a good or service for which no market price exists, or where the market price doesn't reflect the full replacement cost."¹⁹ To date, shadow pricing has most often been applied to GHG emissions or carbon. A 2014 CDP report highlights that many companies are incorporating internal carbon prices into their business strategies. The report explains that companies use shadow pricing as a strategic tool to identify revenue opportunities and risks, and to prepare for regulations related to climate change. It presents 29 companies (including Delta, Disney, Exxon, Google, Microsoft, Shell, and Wal-Mart) that have set an internal price on carbon, with prices ranging from \$6 to \$60 per metric ton.²⁰ Globally, 150 companies that report to the CDP use internal or external regulated carbon pricing as a tool to drive investments in GHG emissions reductions. In 2015 the CDP may add a question about internal carbon pricing to its questionnaire.²¹

Companies such as Nestlé are also using shadow pricing for water, acknowledging the increasing risk of water scarcity to their business. In its 2012 report, *Water Valuation, Building the Business Case*, WBCSD identified 21 business case studies that illustrate why and how different companies have carried out water valuation initiatives.²²

Not All Nature, Not All Negative: Valuing Social Externalities

Attention to social capital is growing, particularly as some companies assign a value to the positive externalities they have in relation to employees and communities. For example, Infosys, a large Indian ICT services firm, has accounted for the value of its workforce since 2008, specifically focusing on the impact of training employees (up to 14,000 annually). Its model accounts for a Human Capital Externality, defined as "the benefit derived by society when employees whose Human Capital Value is enhanced due to training and employee development at Infosys leave the company." The Human Capital Externality was estimated to be worth over \$1.4 billion in 2012. Infosys is able to capture and communicate the positive impact it has on society by using this approach.²³

Similar to the natural capital valuation debate, however, some criticize this kind of valuation, arguing that companies should not assign a dollar amount to employees and their development. Others praise the approach for the potential benefits it can bring to a company and its assessment of value creation if it is truly integrated as part of performance management.²⁴

We encourage continued evolution in the area of valuing social and human capital, as the need is increasing to address urgent societal issues such as inequality, access to health care, education and nutrition. These critical global challenges are the issues upon which businesses have a potentially significant impact (positive or negative), and the very point at which economic activity can be part of the solution as we transition toward a sustainable economy. The role of transparency will be to ensure that the right information is available to inform strategic decisions that optimize the overall impacts.



TAKING ACCOUNT IN A RESOURCE-RICH NATION

Brazilian companies are showing a particular interest in valuing natural capital and externalities as exemplified by several recent actions:

TEEB for Business Brazil, in collaboration with Conservation International Brazil, launched a report about the valuation of ecosystem services featuring consumer products company Natura and biotech company Monsanto, highlighting two case studies of this applied methodology.²⁵

Additionally, mining company Vale conducted an economic assessment of one of its largest natural reserve areas, the Vale Natural Reserve, and featured this assessment in its 2013 report. The study indicated that the 23,000-hectare reserve contributed \$1 billion in economic benefit through the existing value of biodiversity – \$77 million in direct use value from carbon storage and sequestration and \$25 million in indirect use value through services such as pollination, water supply, and air, soil and water quality.²⁶



Challenges & Opportunities

Despite the importance of valuing externalities—in particular in relation to a company's most material issues—there are challenges and unanswered questions. The complicated diversity of approaches and tools, the still somewhat unclear business case, the potential risk of reporting on externalities and the lack of regulatory incentives to account for impacts are all barriers for companies to work through.

However, there are many benefits to increasing transparency on relevant externalities and we see this practice as a critical—and under-utilized—means for businesses to fully understand their material impacts and to make effective decisions about them. Experts actively involved in valuing externalities emphasize potentially reduced risks, lowered costs, enhanced brand equity and increased growth that can come to fruition from having this information in hand.²⁷ Valuing externalities can also provide a more comprehensive understanding of the ways in which the business itself creates value. And, of course, it is not all about risks and cost avoidance: gathering and sharing information about the positive externalities a company creates can enhance company reputation by illustrating its positive impacts on society and build increased momentum around these positive changes.

The Future: Externalities Internalized

Going forward, we anticipate increased attention and movement in externalities valuation, including a value chain approach to assessing impacts, improved valuation methodologies and more effective incentives and regulations on reporting and disclosure. We expect more companies to start valuing externalities with increased application in sectors heavily dependent on natural capital such as the agriculture, forestry, mining and energy sectors.

More incentives and regulations, and more companies taking action, will push the valuation of externalities to evolve and become common practice. Transparency efforts will reflect more robust consideration on the way a company's activities impact society and the environment, especially on the most material issues for the business, and as a result, we anticipate an internalizing of many issues that are now dismissed as externalities.



Applying The Transparency Advancement Tool

We propose the following guidance to implement the Transparency Advancement Tool in order to **consider** externalities, **focus on** those that are most material and **leverage** the data provided by their valuation. This guidance has been developed based on our engagements with experts, a review of the emerging valuation initiatives, and our analysis of how collecting and sharing information on externalities can bring value to companies.



Consider

Identify both positive and negative externalities related to material issues

- Explore indirect and unaccounted for impacts associated with material issues, in particular in upstream and downstream areas of the value chain that are beyond the company's direct control;
- Engage a partner organization or an existing coalition to access tools and methodologies for valuing externalities;
- Draw on external stakeholder perspectives to ensure key impacts are being identified.



Focus

Evaluate the impacts of these externalities using tools and frameworks to quantify impacts, and describe the approach taken

- Identify 1-2 strategic material issues to pilot valuation approaches on relevant externalities;
- Consider identifying one environmental and one social issue;
- Comprehensively assess the externalities, positive and negative, associated with the issue and employ the selected tools and stakeholder input to understand and, where possible, calculate the impacts.



Leverage

Use information on externalities to inform decisions, guide corporate strategy, and communicate relevant information

- Use the results of the valuation to inform decision-making by identifying relevant functional areas and elements of existing corporate strategy as well as key internal stakeholders and initiatives within the business that can benefit from the information and/or that are having the most direct impact;
- Socialize, test and validate the findings internally and consider sharing them externally to progress the agenda with peer companies;
- Repeat the process for additional externalities, refining based on pilot.

Case Study: The Dow Chemical Company

The Dow Chemical Company is a multi-national company based in Michigan, US. The company recognizes that better information regarding ecosystem services in relation to its facilities, specifically regarding meeting environmental regulations, could ultimately lead to stronger business performance as well as better environmental outcomes. In 2011 Dow entered into a collaboration with The Nature Conservancy (TNC) to factor the value of ecosystem services into decision-making at both the corporate and facility level.

The collaboration has focused on three pilot sites to develop tools and analyses for incorporating ecosystem services into decision-making. One of the pilot sites, in Freeport, Texas, is the company's largest manufacturing site and the largest single chemical manufacturing complex in North America, producing more than 40% of Dow products sold in the US and more than 20% of Dow products sold globally.²⁸ It is also located in a biologically important area consisting of freshwater, marsh and forest ecosystems that are important to wildlife and local communities. The collaboration focused on several areas including improving air quality through reforestation. Specifically, Dow sought to demonstrate that planting trees could be a viable and cost effective complement to conventional air filtration systems such as "scrubbers" on smokestacks.

Transparency In Action: Comparative Data on Natural vs. Technological Solutions Through modeling, Dow and TNC found that reforestation could indeed be a cost-effective air quality strategy compared to additional conventional control technology. In their 2012 progress report, Dow and TNC highlight that the reforestation approach "would cost \$470,000 to implement and would remove quantities of ozone and NO₂ equivalent to a range between 122 and 202 tons of NOx total over the next 30 years, at a cost of \$2,400 to \$4,000 per ton of NOx on some lands.²⁹ The cost per ton compares to about \$2,500-\$5,000 per ton of NOx for traditional NOx abatement strategies." While the two approaches had similar implementation costs, reforestation had additional benefits including restoration of wildlife habitat, provision of recreational opportunities and carbon storage provided by the trees.

This bottom-up approach to valuing externalities allows companies to implement their findings to make decisions. As explained by Mark Weick, Director, Sustainability Programs and Enterprise Risk Management at Dow, "Since we own our operations and have direct control over them, it's valuable for us to conduct these assessments at the decision-making level, which is at the facility and plant level."

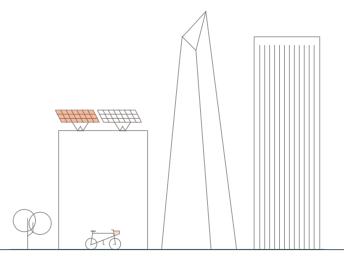




The Future: Scaling Up Cost Savings Provided by Ecosystem Services

"We're both looking to scale up natural infrastructure solutions that make economic sense. From TNC's perspective we get a lot more nature protected. From Dow's perspective these efforts go to their bottom line and help them be more profitable and sustainable." Glenn Prickett, Chief External Affairs Officer, The Nature Conservancy Dow is now working with stakeholders to evaluate reforestation as an emission abatement strategy for ground-level ozone precursors (e.g. vehicle exhaust, industrial emissions). "This could be a cost-effective alternative to pollution control devices, which has a potentially big impact for Dow, TNC and beyond. This natural infrastructure solution could be very scalable so the impacts could be quite meaningful," says Glenn Prickett, Chief External Affairs Officer at TNC. The effort has also spurred further changes inside Dow. Glenn Prickett points out: "The collaboration work has opened minds and intrigued engineers and business analysts within Dow about the potential of conservation as a business solution. Environment is usually a downside risk to be managed, but this practical work has showed that it can be a real upside."

Dow and TNC are continuing to assess other ecosystem services at additional pilot sites and are advocating for legislative changes around the ways it is permissible for companies to meet air quality standards. Both entities have pointed to the critical importance of collaboration in making such progress in valuing ecosystem services.



Case Study: Novo Nordisk



Transparency in Action:

Create an Environmental Profit & Loss Statement (EP&L) The Denmark-based global healthcare company Novo Nordisk has been a leader in sustainability and has long incorporated environmental and social issues into its strategy, known as the Triple Bottom Line (TBL).

In 2012 the Danish Ministry of the Environment asked Novo Nordisk to join a pilot of the EP&L approach in a Danish context to measure their impacts across the value chain. Novo Nordisk was interested in gaining additional insight into the environmental impacts along its value chain and teamed up with the government agency and a team of consultants to conduct the EP&L assessment. As noted by Anne Gadegaard, Programme Director, Corporate Sustainability at Novo Nordisk, who helped manage the EP&L process, "We thought this could be interesting because we had seen what PUMA had done and we wondered if a better understanding of our environmental data could help us better operationalize our environmental data in a different manner in terms of making decisions."

Novo Nordisk followed a seven-step process:

- 1. Establish the scope and boundary of the assessment;
- 2. Map the value chain;
- 3. Conduct an environment impact assessment of each part of the value chain;
- 4. Collect data from the company and suppliers;
- 5. Fill data gaps with modeling and estimates;
- 6. Apply a quantified value to the changes in society and the environment;
- 7. Generate a profit and loss statement showing the financial impacts of environmental performance.

Novo Nordisk's EP&L includes all production lines throughout the company's supply chain. Key Performance Indicators (KPIs) used in the EP&L were chosen based on data provided by Novo Nordisk and their degree of materiality to the business, including greenhouse gas emissions, other air pollutants, water consumption and land use.

The EP&L revealed that Novo Nordisk's total environmental impacts amount to €223 million, with €34 million in water use, €171 million in GHG emissions, and €18 million in air pollution. The majority (75%) of impacts occur in the raw material extraction phase and in the final product phase and are caused by GHG emissions. In the raw material phase, these impacts are associated with extracting metals, oil and natural gas used for plastic products, and cultivating farm crops that involve large amounts of water and fertilizer. In the final product phase, the impacts are related to finished products that Novo Nordisk sources such as production equipment, clinical and laboratory services, and transportation and distribution. The EP&L also assesses the indirect land use impacts of growing maize as a significant raw material input to Novo Nordisk's products. The land use impacts amount to €37 million. Novo Nordisk's direct operations account for only 13% of the total environmental impact.



A Wider Perspective: Externalities

The Future: Putting the Data to Use & Exploring the "Profit" in the EP&L

"The EP&L has given us data in a way that we have never had before. We will use that as part of the review of the environmental strategy this year," Anne Gadegaard noted. "And if we want to continue having high quality materials and working conditions, while reducing our environmental footprint, we will need to have a different mindset throughout the organization about how to do things differently, so working with reducing our environmental footprint becomes a question of prevention rather than treatment."

While Novo Nordisk plans to use the findings of the EP&L in its strategy, exactly how to go about doing this is a challenge. There is also a challenge around timeframes and decision-making. Novo Nordisk uses a 10-year outlook for business decision-making while many of the impacts highlighted in the EP&L have a much longer timeframe. Further, there is the challenge of data credibility – despite the company's strong reporting practices already in place, 70% of the data for the EP&L was based on assumptions, highlighting the scope of the data collection challenge.

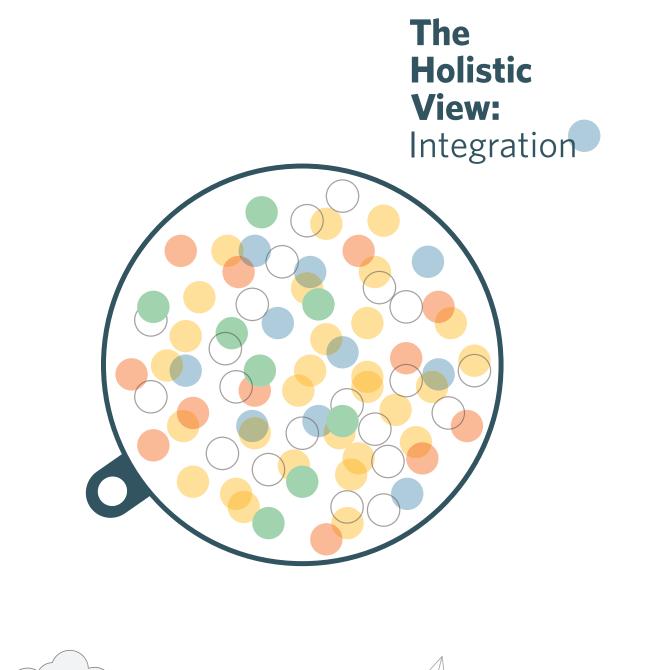
There is another data gap that represents a potentially significant opportunity: the current assessment only includes environmental losses and does not reflect the profit side. The EP&L report notes that the profits are likely to occur at the product end-of-life stages where practices such as closed-loop recycling may come in to play and produce an environmental profit.

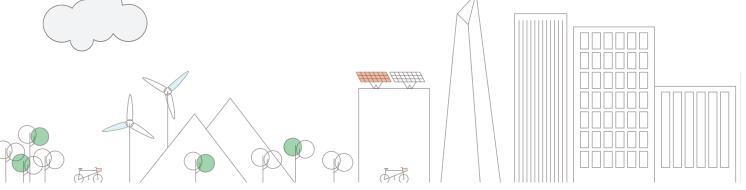
ABOUT ENVIRONMENTAL PROFIT & LOSS STATEMENTS (EP&Ls)

According to Trucost, an EP&L "places a financial value on environmental impacts along the entire value chain of a business to help companies combine sustainability metrics with traditional business management." The Danish Ministry of the Environment explains: "In the EP&L, the 'Profit' refers to any company activity that benefits the environment, whereas the 'Loss' refers to activities that adversely impact the environment. Almost all companies will have a deficit in the EP&L, reflecting the net cost to the environment. In the current system, the losses are not costs that a company will have to pay, and are therefore called 'external costs'."³⁰ EP&Ls differ from Life Cycle Assessments (LCAs) in that they are conducted at the corporate level, whereas LCAs analyze impacts at the product or facility level. Data from LCAs is often incorporated into EP&L reports.

"If you are putting an internal price on those scarce resources, you are doing yourself a favor because you are preparing the company for something that is inevitable. We will eventually have mandatory reporting requirements around these issues. And I don't think it is a question of 'if this is going to happen' but 'when'." Anne Gadegaard, **Director, Global TBL** Management, Novo Nordisk

How Transparency Drives Performance







At a conceptual level, integration is defined as "combining one thing with another so that they become a whole."³¹ To that end, once a company understands its material issues, accounts for relevant externalities and embeds this information into corporate strategy, it is well on its way to applying effective transparency to become more fully integrated.

Such a company will be better positioned to thrive in a sustainable future—its business needs will be fulfilled while operating within environmental limits and supporting the society in which it functions. Furthermore, such a company is likely to be transparent on issues that matter most. It will have a clearer picture of what these issues are and how best to engage and inform in ways that drive better decisions rather than merely provide updates to protect credibility.

Corporate integration is defined as the bringing together of corporate and sustainability strategies to be one and the same in their creation of value for environment, society, and business.

SustainAbility definition of integration

Today, most companies are not exhibiting true integration, nor are they (yet!) actively seeking to achieve it in the way we intend here. On the contrary, we heard repeatedly that, in spite of significant resource investment, materiality and other potentially impactful sustainability efforts are often simply not on the radar of senior decision-makers. Yet while sustainability may now be mainstream in the sense that many companies communicate their sustainability goals and progress, it is generally not a central indicator on the CFO or Board of Director's dashboard.

"Reporting efforts are a way to highlight risks and opportunities related to the business. With that, the decision making process is safer and more solid as it is based on the company's reality." Vania Borgeth, Advisor to the CEO and IR efforts coordinator, BNDES (Brazilian Development Bank) Having said that, we see promising signals that more companies are heading in this direction, and there are some beacons of leadership that we explore in greater detail in this section. This chapter will examine the current activity in integration, and present a range of challenges and opportunities, guidance on the application of SustainAbility's Transparency Advancement Tool and case studies illustrating examples of integrated thinking leading to improved performance.



EXTERNAL GUIDANCE: THE IIRC FRAMEWORK

Although integration may seem daunting, there has been great thinking already around how companies can work toward integration more efficiently. The IIRC, a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs, has developed a framework to guide the process.

While the IIRC's framework is often described as "a reporting framework," it is important to note that true integrated reporting is not simply a matter of combining financial and non-financial reports into one document, but rather a means of reflecting integrated thinking. The IIRC framework aims to bring greater cohesion and efficiency to the reporting process, to break down internal silos and to improve the quality of information available to investors as they make decisions about where to allocate capital. The framework focuses on the connectivity between financial and non-financial information and guides companies to assess their impacts on these different forms of capital. Companies are beginning to use the framework to guide their reporting, and some companies are mandated to use it.xi Just over 100 companies are members of the IIRC's Pilot Programme Business Network in which companies collaborate to develop the content and principles of the framework. The IIRC also has an investor network with over 35 global investor organizations actively contributing feedback on the IIRC's framework and how it can be improved to better engage investor audiences.

The Current State

Integrated Reporting

Integrated reporting is one tactic that is driving integration forward.^x In order to effectively report in an integrated way a company must first function in an integrated way. This involves understanding how the company creates value, which in turn requires consideration of how different capitals such as financial, natural and human capital relate to each other in the context of the company's operations.

Companies are increasingly pursuing integrated reporting, in many cases using the IIRC's framework, which focuses reporting on an investor audience and guides companies to review their business model, interconnecting issues and value creation. As of 2013 few companies were producing integrated reports. However, there is growing interest in integrated reporting and increasing evidence of its benefits. A recent study conducted by Black Sun shows that 92% of IIRC Pilot Programme businesses say that integrated reporting has improved their understanding of their business' value creation. Additionally, 79% of respondents said that decision-making has improved as a result of integrated reporting.³¹ The IIRC is currently developing more specific guidance on its principles-based framework, and we anticipate continued interest in, and uptake of, integrated reporting.

So what does integration look like in a report? Software company SAP has produced two integrated reports to date and SAP's Chief Sustainability Officer Peter Graf explains how the company came upon integrated thinking and began recognizing its value. "We have been measuring key performance indicators on the financial and non-financial side for quite a while. But one day, we started to put them all on a white board, trying to draw connection lines between them. Before we knew it, the chart was pretty full. We started to do research both internally and externally to better understand and compute those relationships. Suddenly, it became clear just how interconnected non-financial and financial performance indicators really are."³³

Novo Nordisk has been producing integrated reports for 10 years. Susanne Stormer, VP Sustainability, notes, "Putting an integrated report together takes tremendous team effort. It requires frequent interaction between people working in finance, legal, development, operations, sales and marketing, to name just a few, and pushes everyone toward more integrated thinking. I can tell you that it does not make the journey easier; however, it makes the result much more rewarding."³⁴

^{*} Integrated reporting as outlined by the International Integrated Reporting Council (IIRC) is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. http://www.theiirc.org

^d For example, the King Code of Governance Principles for South Africa 2009 (King III) and the listing requirement of the Johannesburg Stock Exchange which requires that all companies issue an "integrated report" for financial years starting on or after March 1, 2010 or explain why they are not doing so.



INTEGRATION BEYOND REPORTING

Integrated thinking can be reflected in a company's activities beyond reporting. One example is Nike's work to integrate environmental considerations into the design process by creating new flows of data. Nike uses the "Making App" which allows Nike designers to compare 22 materials and their impacts in the areas of water, chemistry, energy, and waste.

Designers then use this information as an input to their decisions around which materials to select for new products.

"Suddenly it became clear just how interconnected non-financial and financial performance indicators really are." Peter Graf, Chief Sustainability Officer, SAP

C-Suite Engagement

Another notable initiative from the same group that helped launch the IIRC is The Prince's Accounting for Sustainability Project (A4S) which formed its CFO Leadership Network in late 2013. The Network is the first grouping of its kind to focus on the role CFOs play in integrating environmental and social issues into financial decision-making. The Network is developing and sharing successful strategies so that they become the norm across all businesses. Efforts include improved modeling of future risk and uncertainty as well as engagement with investors and other stakeholders to increase their understanding of the commercial benefits of sustainable business models. Members include companies such as Crown Estate, Danone, Marks & Spencer, Royal DSM, Sainsbury's and Unilever, several of whom are also part of the IIRC Pilot Programme Business Network.

Rise Of Benefit Corporations

Another development that shows signs of integration is the Benefit Corporation movement.xii Non-profit B Lab is working to redefine what success means for business and encouraging businesses to make decisions in an integrated way that takes into account the interests of society along with the financial bottom line. Whereas traditional businesses in most jurisdictions are legally obliged to maximize benefit to shareholders and therefore are not incentivized to take into account externalities or other material sustainability issues, Benefit Corporations voluntarily meet higher standards and amend their articles of incorporation to allow them to serve a larger purpose. In the US, benefit corporation legislation allowing for this change in business purpose has passed in 27 states and 14 other states are underway as of September 2014. This subtle legal shift may underpin fundamental changes to corporate behavior and enable companies to evolve their strategies in more integrated ways. Yvon Chouinard, founder of Patagonia, a Benefit Corporation, noted, "Benefit corporation legislation creates the legal framework to enable mission-driven companies like Patagonia to stay mission-driven through succession, capital raises, and even changes in ownership, by institutionalizing the values, culture, processes and high standards put in place by founding entrepreneurs."35

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^{kii} B Lab also supports a B Corp Certification, which differs from being a Benefit Corporation in that B Corp certified companies must meet a high standard of social and environmental performance but they do not alter their corporate bylaws or purpose. There are currently 1,050 certified B Corps in 60 industries around the world.



One of the main barriers to integration is that at the moment there are few incentives (beyond a moral argument) for a company to integrate. As long as the purpose of a company is perceived as only that of maximizing value to shareholders, it will be difficult for senior leadership to push for increased integration of sustainability factors. There are also downsides to something as tactical as producing integrated reports. For example, we heard from several corporate stakeholders that when companies produce integrated reports alone, it is possible that some of the useful sustainability narrative that would have been included in the separate report may be excluded.

Despite these challenges, the potential benefits of integration, such as improved resilience and better investor engagement, are promising. For example, Nestlé's rural development work highlights the opportunity for integration to improve supply chain resilience through increased agricultural productivity and improvements in farmer livelihoods, in turn securing the long-term supply of key commodities. This underscores a company's interest in applying this type of more integrated thinking to strengthen performance.³⁶

On the reporting front, one study of 1,000 firms by Harvard Business School showed that those firms practicing integrated reporting have a longer-term investor base and fewer transient investors.³⁷ Another study conducted by the Association of Chartered Certified Accountants indicates that 90% of polled investors believe it would be valuable for companies to combine financial and non-financial information into an integrated reporting model.³⁸ The potential for integration to increase investor interest and, more broadly, to enable companies to act as more integrated corporate citizens, is an opportunity not to be missed.

The Future: Integration Is Everywhere

Examples of effective integration are still an anomaly today. However, we anticipate a significant shift in the coming decade to a point where integration from a management and reporting perspective is the new norm. We see a convergence of factors driving integration, from securing supply chains to accessing new markets to attracting financial capital from long-term investors. And we note a dynamic and evolving set of tools and expertise making it more possible for companies to report and communicate—and to function—in an integrated manner. This integration will help them meet the increased demands and expectations of sustainable stock exchanges and investors, other external stakeholders and enlightened senior managers who will increasingly be working from a dashboard that incorporates a holistic view of the business.



Applying The Transparency Advancement Tool

We propose the following guidance to implement the Transparency Advancement Tool and to **consider** integration as a cross-functional performance management opportunity, to **focus on** areas of value creation and interconnectivity between issues and functions, and to **leverage** the expertise, strategic planning processes and available information to maximize sustainable performance. This guidance intends to help companies leverage transparency efforts to drive more integrated corporate strategies, which will, in turn, be reflected in external communications.

C

Consider

Develop a crossfunctional governance structure to engage on material issues

- Establish a senior-level governance structure that enables cross-functional discussions regarding material issues;
- Leverage existing tools, such as the IIRC's Integrated Reporting framework, to structure further engagements with investor relations, risk management and those responsible for corporate strategy;
- Include a thorough discussion of material sustainability performance information in the annual report and a review of financial performance in relevant sustainability communications;
- Consider leveraging existing resources and coalitions such as the A4S.



Focus

Account for the interconnections between material issues and the business' value creation

- Assess interconnections between issues across environmental, social and financial areas;
- Assess how material issues interrelate and how their associated externalities interconnect to the business model and value creation;
- Use existing tools and frameworks to guide the assessment and engage key internal stakeholders;
- Review sustainability issues as both risks and opportunities taking into account the positive potential value creation associated with certain issues.

Leverage

Incorporate sustainability into business strategy and ensure business model is founded on an understanding of social, environmental and financial issues

- Support and enable staff across functions in evolving their roles to incorporate more integrated approaches to managing material sustainability issues within core business operations;
- Publish regular narrative and data about the integrated strategy and performance and produce an integrated report;
- Leverage integrated reporting—both process and outputs—to drive decisionmaking and further inform strategy.

Case Study: The Crown Estate

The Crown Estate is an independent commercial business in the UK created by an Act of Parliament. It actively manages and invests in a £10bn portfolio of assets throughout the UK including commercial, agricultural and strategic housing land, and the seabed. The Crown Estate demonstrates a strong approach to materiality and valuation of externalities. This has enabled the business to create an integrated strategy which is reflected in its integrated report and which ultimately drives long-term value growth.

Sustainability has always been important to The Crown Estate's business. In early 2012, with the arrival of a new CEO the company began reviewing social and environmental trends for the next 50 years and recognized that challenges to come would require a more integrated approach to its business. In order for the business to succeed, sustainability could not be relegated to committees and experts; instead, it needed to be fully incorporated into the business strategy and owned by employees.

Transparency in Action:

Using Integrated Reporting to Drive Overall Integration

The Crown Estate's ambition for greater integrated thinking led it to join A4S and the IIRC. This integrated approach brought The Crown Estate's material issues out of the sustainability realm and into the main business. It also drove crossfunctional engagement of executives, led to different kinds of discussions about the company's business model and encouraged the company to view sustainability as value creation first and foremost. The Crown Estate aims to create a fully integrated strategy and business model, account for all material externalities and ultimately measure its value creation through a single key performance indicator. To this end the company has embarked on a three-year process (to be completed in 2015) to integrate its reporting with the following key steps:

- Year 1 Integrate: Develop an integrated strategy, business model, and materiality approach;
- Year 2 Embed: Assess the company's impact and opportunities relating to the six capitals - what The Crown Estate refer to as Resources and Relationships (Financial, Physical, Natural, Our people, Know-how and Networks);
- Year 3 Deliver: Empower staff to deliver on the new strategy that focuses on the relationships between the capitals; improve measurement of performance; develop the connectivity between the vision and strategy that demonstrates integrated thinking and communicate this through an integrated report.

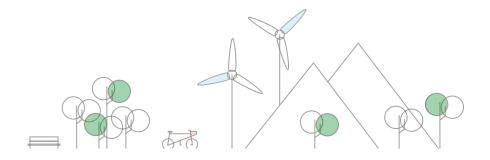


Part of The Crown Estate's integration work is to understand the total value it brings to society, the economy and the environment—and to shift from looking at outputs to outcomes. Through its 2013 report, *Total Contribution*, The Crown Estate demonstrates how it brings value to the UK beyond financial profit to the Treasury and explains how it considers social, environmental and economic externalities. It aims to address both the negative and positive impacts inherent to real estate development, and to assess its direct contributions, indirect contributions (activities carried out within its supply chain), and enabled contributions (activities carried out on its land by others). For example, the *Total Contribution* report highlights that 92,000 jobs are enabled on its estate, 1.6% of UK's electricity production is delivered through offshore wind (up to around 4% in 2014), and the company's educational activity engages almost 9,000 students and other visitors by providing skills and resources for future careers in relevant industries.³⁹

The Future:

Scaling Up Cost Savings Provided by Ecosystem Services The Crown Estate is working toward having one KPI that reflects the company's entire contribution. A tool that would better measure this value would enable executives to illustrate the value of the company and its progress. This will improve and build on its *Total Contribution* work to include a balanced approach across positive and negative impacts and to increase the robustness of data and information on its less direct impacts. The Crown Estate is also working with other companies on a similar journey to explore the principles of value creation and to share best practices.

"Integrated reporting demands a team effort—the entire company, including senior management and the CEO must be on board. Sustainability needs to be seen strategically and headed by a group, ideally led by the CFO." Mark Gough, Head of Sustainability, The Crown Estate



Case Study: Itaú Unibanco

The merger of Itaú and Unibanco in 2008 resulted in the creation of the second largest Brazilian financial institution by asset value. Itaú Unibanco has significant retail banking services throughout the country and serves customers of all income levels. The company's purpose is "to improve people's lives," and its vision is to "be the leading bank in sustainable performance and client satisfaction." These are especially important themes in Brazil because its socio-economic challenges require greater understanding and attention from the financial services sector to meet some of the population's most basic needs.

Financial education is one of the three main focuses of Itaú Unibanco's sustainability strategy. The bank has integrated this issue into its core business operations, specifically by helping its employees, clients and society develop a healthy

relationship with money. This financial education focus also helps the bank avoid default-related risks and is considered a key element to establish and reaffirm trust

between the bank and its clients.

ltaú

Transparency In Action: Supporting Clients' Choices in The Short-And Long-Term Among many internal initiatives to support this focus, one critical step was including the company's sustainability team members on the committee that governs products and services. This improved the integration of financial education into decisions about new and existing products. The committee worked to improve transparency and communications with clients, simplify products and services, and offer financial advice through different communication channels, offering the right product to the right client.

One example of these integrated solutions is a warning message system to help notify clients about risky decisions. When clients are about to access certain credit-related financial products at an ATM, a message appears on the ATM screen to inform customers about the possible impact of this decision before they can proceed. Additionally, when existing contracts for lending products are renegotiated, employees responsible for the renegotiation are trained to identify signs of unsustainable credit use and offer customers products that are more appropriate to their needs.

This approach is fully connected to key elements of the bank's overall strategy: growing the loan portfolio while maintaining asset quality as well as developing strong relationships with clients based on client segmentation. By bringing the sustainability team onto the product and service governance committee, better decisions can be made about customer opportunities and about ways to reduce risk and improve profitability for Itaú Unibanco. More broadly, this integration has helped leadership make more informed decisions by considering the financial education lens as a key component in defining product strategy. It has simultaneously led to higher satisfaction rates and lower default rates building trust between the bank and its customers.

The Future:

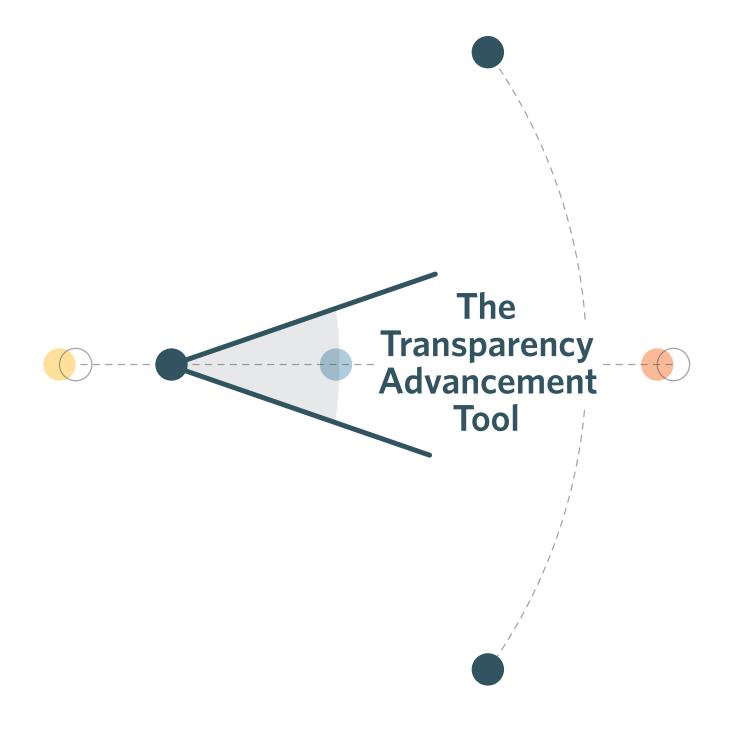
Driving Large-Scale Behavior Change Scaling up the financial education agenda is one of Itaú Unibanco's goals in order to attain a higher level of integration. The objective is to help people make better use of their money through a set of broad and profound actions that drive largescale behavior change. This strategy is based on three pillars: (i) the day-to-day work of employees; (ii) to offer solutions to clients (and even non-clients) as a way to support better choices; (iii) to influence both the marketplace and society more broadly, contributing to the social and economic development of the country.

"In order to make sustainability work, you need to integrate it into the company's core governance. Creating parallel governance will not help you to manage sustainability issues from a business perspective. It might keep sustainability apart from what's going on within the business and prevent sustainability from contributing to improving overall performance."

Denise Hills, Superintendent of Sustainability, Itaú Unibanco

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How Transparency Drives Performance



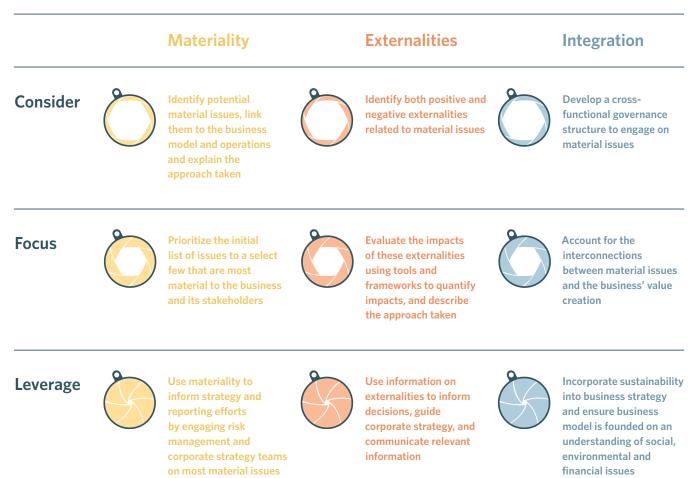
To steer companies on their journey toward effectively prioritizing material issues, accounting for externalities and integrating sustainability and corporate strategies, we offer the following Transparency Advancement Tool.

The tool can be used as a high-level assessment tool to identify strengths and weaknesses in existing practice and to benchmark where gaps remain. The tool also acts as a map to guide companies in the steps within each of the priority elements of materiality, externalities and integration. The guidance following the tool provides practical steps that companies can take to advance in each element of transparency.

Companies who are willing to apply this level of rigor to their transparency efforts to truly engage on material issues, including taking externalities into account in a way that drives integrated strategies—are likely to be well-positioned to thrive in a sustainable future.

Figure 6:

The Transparency Advancement Tool



Guidance: Materiality

Consider

Identify potential material issues, link them to the business model and operations and explain the approach taken

- Ensure a solid understanding of the business by reviewing the business model, financial performance and value chain. Review key macro and sector trends such as new and emerging market needs, regulatory changes, resource constraints and other significant current or expected impacts on the business.
- Identify approximately 15-25 material issues using the following inputs:
 - Issues and indicators included in GRI sector supplements, SASB guidance and other sector-specific resources;
 - Research and expertise from NGO, government, think tank and academic reports;
 - Assessment of peer company material issues;
 - Assessment of key stakeholder inputs, e.g., investor dialogue, shareholder activism, raters and rankers, and relevant media reports.

Focus

Prioritize the initial list of issues to a select few that are most material to the business and its stakeholders

- Map the issues against the company's value chain to identify boundaries and areas of greatest impact for each issue;
- Summarize and assess business risks and opportunities for each issue;
- Identify a shortened list of strategic material issues through select interviews with key internal and external stakeholders.



Leverage

Use materiality to inform strategy and reporting efforts by engaging risk management and corporate strategy teams on most material issues

- Socialize the issues and approach internally;
- Integrate the material issues into the larger corporate strategy and illustrate links to the business model and operations;
- Engage risk management and corporate strategy teams, and other relevant areas of the business such as product R&D, HR, marketing and investor relations;
- Use material issues to structure concise reporting and communications about the business and its value creation in order to engage stakeholders on the most critical issues.

Guidance: Externalities

Consider

Identify both positive and negative externalities related to material issues

- Explore indirect and unaccounted for impacts associated with material issues, in particular in upstream and downstream areas of the value chain that are beyond the company's direct control;
- Engage a partner organization or an existing coalition to access tools and methodologies for valuing externalities;
- Draw on external stakeholder perspectives to ensure key impacts are being identified.



Focus

Evaluate the impacts of these externalities using tools and frameworks to quantify impacts, and describe the approach taken

- Identify 1-2 strategic material issues to pilot valuation approaches on relevant externalities;
- Consider identifying one environmental and one social issue;
- Comprehensively assess the externalities, positive and negative, associated with the issue and employ the selected tools and stakeholder input to understand and, where possible, calculate the impacts.

Leverage

Use information on externalities to inform decisions, guide corporate strategy, and communicate relevant information

- Use the results of the valuation to inform decision-making by identifying relevant functional areas and elements of existing corporate strategy as well as key internal stakeholders and initiatives within the business that can benefit from the information and/or that are having the most direct impact;
- Socialize, test and validate the findings internally and consider sharing them externally to progress the agenda with peer companies;
- Repeat the process for additional externalities, refining based on pilot.

Guidance: Integration

Consider Develop a cross-

functional governance structure to engage on material issues

- Establish a senior-level governance structure that enables cross-functional discussions regarding material issues;
- Leverage existing tools, such as the IIRC's Integrated Reporting framework, to structure further engagements with investor relations, risk management and those responsible for corporate strategy;
- Include a thorough discussion of material sustainability performance information in the annual report and a review of financial performance in relevant sustainability communications;
- Consider leveraging existing resources and coalitions such as the A4S.



Focus

Account for the interconnections between material issues and the business' value creation

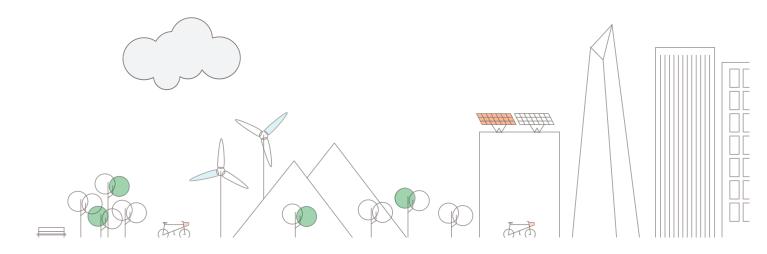
- Assess interconnections between issues across environmental, social and financial areas;
- Assess how material issues interrelate and how their associated externalities interconnect to the business model and value creation;
- Use existing tools and frameworks to guide the assessment and engage key internal stakeholders;
- Review sustainability issues as both risks and opportunities taking into account the positive potential value creation associated with certain issues.



Leverage

Incorporate sustainability into business strategy and ensure business model is founded on an understanding of social, environmental and financial issues

- Support and enable staff across functions in evolving their roles to incorporate more integrated approaches to managing material sustainability issues within core business operations;
- Publish regular narrative and data about the integrated strategy and performance and produce an integrated report;
- Leverage integrated reporting—both process and outputs—to drive decisionmaking and further inform strategy.



Final Remarks

We recognize that transparency alone will not lead us to a sustainable future. However, we believe it is a powerful element that is critical to sustainability leadership.

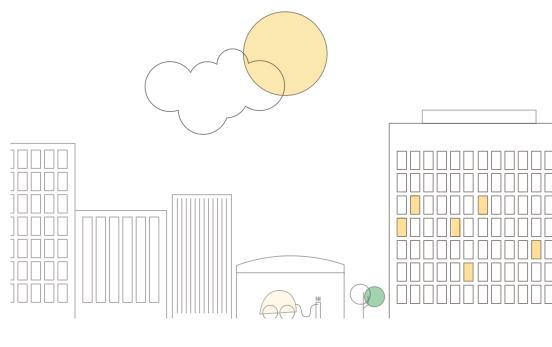
> Our guidance on the three key elements of transparency—materiality, externalities and integration—is intended to equip companies to fully leverage the value of transparency. We hope to see companies applying these elements, improving their social, environmental, and financial performance, and contributing to our shared sustainable future.

We recognize that this is not an easy task. It will take bold action and potentially significant change to the way some information is gathered and used, and the way some stakeholders—both internally and externally—are currently managed. We aim to support companies in this endeavor through our Engaging Stakeholders network curriculum, events, and continued research and discovery on key topics. We will also continue to track the external context for transparency as mandatory reporting regulations, investor interest, and standards and frameworks continue to evolve.

What's Next?

SustainAbility will continue to host network-based dialogue and wider online and in-person discussions about our transparency research as our thinking on this topic evolves. We will also continue to seek out, understand and share ideas about how transparency can drive change, improve performance and play a role in transitioning to the sustainable future we seek.

To share feedback please contact stakeholders@sustainability.com.





Acknowledgements

This report was made possible by the funding and support of members of SustainAbility's Engaging Stakeholders network. We convene this group of global companies through virtual dialogue and in-person workshops to explore the theme of corporate transparency and its role in driving the sustainable development agenda forward.

> A primary benefit of the network is the annual creation of one collective piece of research relevant to our members. We are grateful for the member input that we received on *See Change* by way of research interviews and case studies, and we appreciate the connections that members made on our behalf to link us to stakeholders with further insights and ideas.

We would also like to thank Light and Itaú Unibanco for providing additional funding, without which we would not have been able to explore the Brazilian transparency context in further detail. The opportunity to better understand the role of transparency in Brazil has opened up many new channels of learning and discussion, and we believe the network and stakeholders at large will benefit from this knowledge.

We also owe a debt of gratitude to the many individuals, including our colleagues at SustainAbility Mark Lee and Chris Guenther, and organizations that shared their time, insights and experience with us as we gathered information for this report. The topic of corporate transparency is broad, and these conversations helped us winnow down the ideas to determine what is most critical to our readership, and most importantly—what is most likely to further transparency in a way that drives sustainable change. We thank you for these productive, inspiring conversations.

Finally, we gratefully acknowledge the insight, collaborative spirit, research inputs and writing efforts of our friends at the consultancy Catavento in Rio de Janeiro, Brazil, in particular Clarissa Lins and Leonardo Bastos. Your perseverance, high standards and cooperative approach as we undertook this rather unscripted journey together made the results better and made the process more enjoyable for good measure. It is this kind of international, cross-cultural and objective-oriented collaboration that gives us hope for the future.

Finally, we thank the design agency Strudel for the graphic design and illustration, which have brought the themes within this report to life.

Engaging Stakeholders Members & Sponsors

Your Agriculture Company	AEP AMERICAN° ELECTRIC POWER	AstraZeneca	BAYER Bayer
CATAVENTO	Chevron	cisco.	CocaCola Enterprises
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MICHELIN A botter way forward	Good Food, Good Life	U NOVARTIS	Novelis
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For more information, visit www.sustainability.com stakeholders@sustainability.com

SustainAbility Inc. 155 Water Street Brooklyn, NY 11201 +1 718 210 3630 telephone

2323 Broadway Oakland, CA 94612 +1 510 982 5003 telephone

SustainAbility Ltd. 3rd Floor 20-22 Bedford Row London WC1R 4EB +44 20 7269 6900 telephone



