

# Are extant tools fit for measuring the business contribution to sustainability?

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**Abstract:** Scholars criticize extant corporate sustainability tools as insufficient to ensure sustainability because they focus on the organization only and disregard systemic interactions and global sustainability challenges. This paper investigates the veracity of this argument by critically screening and analysing a set of 226 management, reporting and learning tools.

## I. INTRODUCTION

Milne & Gray [1] argue that „incorporating an entity’s economic, environmental and social performance indicators into its management and reporting processes [...] has become synonymous with corporate sustainability”. This kind of thinking embodied in the logic of the triple bottom line (TBL), they posit, is insufficient to ensure corporate sustainability because it focusses on the organization and disregards systemic interactions and global sustainability challenges. They make their case using the illustrative examples of the GRI, the Global 100 Sustainability Ranking and the Dow Jones Sustainability Index. However, it remains unclear in how far their argument is applicable to the wider landscape of sustainability management control, reporting and learning tools available to business.

We fill this gap by critically screening and analysing a set of 226 such tools as regards their potential to measure and manage the business contribution to sustainability, i.e. corporate sustainability.

## II. CONCEPTUAL FRAMING

While corporate sustainability as a concept has been discussed in academia for the last 25 years [4], its definition remains elusive [3]. Nevertheless, a number of characteristics seem to apply across many of the conceptualisations in use. On the one hand, the concept encompasses economic, social and environmental sustainability dimensions [3]. This is in line with the TBL concept that Milne & Gray [1] identify as the rock bottom of contemporary thinking about corporate sustainability. Narrowly applied, it would thus seem that an overly strong reliance on the TBL concept might indeed play out at the expense other constituent characteristics of corporate sustainability and lead to a situation where “Businesses and their associations have limited their ideas to issues about themselves” [1]. On the other hand, corporate sustainability also incorporates other perspectives prevalent in the literature, notably:

- a) **The stakeholder perspective**, which considers the relationship between the organisation and others [4]; [5].
- b) **The systemic perspective**, which places the organisation in the context of socio-ecological systems [6].

- c) **The institutional perspective**, which emphasises the institutionalization of practices for corporate sustainability [7] as well as the role of business in multi-level institutional configurations [8].

We understand tools to be “the management instruments, concepts and systems” used by business to operationalize and implement corporate sustainability [2]. This definition applies to a broad range of standards, frameworks, measurement approaches, and management systems currently available. Systematically handling such a variety of tools is difficult due to lack of a universally accepted classification [9]. We therefore propose such a classification building on Maas, Schaltegger & Crutzen [10] who distinguish between

- a) **Management accounting & control tools** (MC tools), which support internal management control and strategic decision-making. Notable examples are the WBCSD’s Measuring Impact Framework [11] and the ISO 14000 environmental management standards [12].
- b) **Sustainability assessment & reporting tools** (R tools), which aim at transparency regarding the discharge of corporate sustainability vis-à-vis external stakeholders. The GRI Standards [13] and the Integrated Reporting Framework [14] are arguably the best-known examples.

Furthermore, we introduce a third class of tools, namely

- c) **Organizational learning tools** (L tools), which deliver guidance on sustainability principles, responsible corporate conduct and specific sustainability issues, without providing a well-specified measurement or management approach. For instance, ISO 26000 [15] and the WBCSD’s Eco-efficiency learning module [16] are included here.

## III. METHODS

This paper investigates a comprehensive sample of 226 MC, R, and L tools. In doing so, we have at our disposal a sample that is significantly more comprehensive than previous collections of tools, such as the Foundation Center’s “Tools and Resources for Assessing Social Impact” (n=150) [21] or the WBCSD/GRI/UNGC “Inventory of Business Tools” (n=58) [22].

However, we build on these predecessor datasets. Most of the tools from these sources were also included into our own database. We complemented the sample by new and emerging tools, such as the Natural Capital Protocol [23] and the SDG Compass [24].

For the analysis of our sample, we derived a set of five criteria from literature on corporate sustainability tools. Scholarly criticism of corporate sustainability tools holds that they:

- a) Hardly ever address system wide **sustainability challenges**. In order to assess the veracity of this claim, we turn to the Sustainable Development Goals (SDGs) [25], as a universally accepted sustainability agenda, in order to determine sustainability issue coverage and consideration of global sustainability challenges.
- b) Fail “to look beyond physical transactions toward relational aspects of sustainability” [1] and consequently tend toward selective boundary setting and scoping. Tools that contribute to corporate sustainability will thus not only consider the organization but have a wider **scope**. Such tools will also consider both **positive and negative** as well as **direct and indirect impacts** arising from corporate activities.
- c) Entail little to no **stakeholder involvement**. Tools contributing to corporate sustainability will involve stakeholders at some point in the assessment, management or reporting cycle.
- d) Tend to disregard the growing body of **data** concerning sustainability. Tools that contribute to corporate sustainability thus will not limit themselves to company-internal performance indicators but also consider **company-external data** on sustainability trends, risks and opportunities.
- e) Do not meet “Basic standards of information reliability and completeness that we assume for financial information.” [1] While we cannot comprehensively address this issue, **independent verification** is one important aspect of information reliability [30]. We therefore used this criterion as a proxy.

These criteria may serve as a yardstick for the assessment of the potential of extant management control, reporting and learning tools to contribute to corporate sustainability.

#### IV. FINDINGS

We find that among our sample, only 15% (n=33) of tools comprehensively consider all three sustainability dimensions (for relative frequencies for each type of tool see Table 1). The majority to tools covers two dimensions (environmental and social) or focusses on one specific sustainability issue, e.g. climate change, attributable to one of the sustainability dimensions.

TABLE 1 CORPORATE SUSTAINABILITY TOOLS

	MC Tools	R Tools	L Tools
Sustainability Dimensions <sup>n</sup>	124	34	68
Economic	23,2%	26,5%	20,6%
Environmental	56,0%	52,9%	29,4%
Social	52,8%	58,8%	60,3%

We also find similarities and differences between the types of tools as regards sustainability issues. Across all three types, decent work and labour conditions feature in more than half of the screened tools (69% of MC tools, 62% and 60% of R and L tools respectively). The group of MC tools sustainable production & consumption (SCP, 64%), water (55%) and life on land (48%) emerge as clear priority themes. SCP (53%) and life on land (41%) are also important issues in R tools along with a strong focus on governance issues (41%). L tools exhibit a strong focus on social issues, most prominently health (44%).

In terms of scope, we find that the majority of tools focus on the organization as primary level of analysis. This tendency is particularly strong in R Tools (91%) but also present in the other two types (71% of MC tools & 59% of L tools). However, consideration of the whole value chain as secondary level of analysis has marked importance as well with around half of the tools of all three types considering this wider scope. Positive and negative impacts are consistently addressed by about half of the tools across the three types. Consideration for indirect impacts, however, is considered only by a minority of tools (23% of MC tools, 15% of R tools, 21% of L tools).

Stakeholder integration is mandatory or strongly recommended in less than half of the tools, with the lowest rate occurring in R tools (29%) and highest in L tools (49%).

As regards consideration of company-external data in assessments, differences exist between the three types of tools. While only 11% of R tools consider external data, MC (38%) tools and L tools (37%) draw on such data to a larger extent.

Independent verification does not feature prominently among either type. Mandatory assurance is required for 21% of R tools, but only a small fraction of MC and L tools (8% respectively).

#### V. IMPLICATIONS FOR MEASURING THE BUSINESS CONTRIBUTION TO SUSTAINABILITY

While selected R tools (especially GRI & IR) and some MC tools (e.g. environmental management systems & sustainability balanced scorcard) have received ample attention in the sustainability management and accounting literatures [17]-[20], a holistic consideration of the capabilities of tools to support business in contributing to sustainability is still lacking.

Our paper therefore has significant theoretical and managerial implications. From a theoretical perspective, it contributes to the discussion around the fitness of extant sustainability management and accounting theories to capture the “various types of, risks to, and potential impacts on both human biophysical and ecosystem health, for current and future generations, [...] (and) the integration of these systems with [...] socioeconomic challenges” [26], [27]. For managers, our analysis provides insights into the underlying assumptions, features and capabilities of extant tools to adequately address corporate sustainability [28], [29].

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