

## **You Can't Spell ESG Without I**

### **Lars Pedersen and Sveinung Jørgensen**

There is widespread reference to the field of ESG and sustainability as an “alphabet soup” due to the manifold acronyms relating to standards, institutions, and frameworks related to sustainability reporting and to sustainable finance. In this paper, we argue that another letter needs to be added to the mix, as we argue that you cannot spell ESG without I. Here, the letter “I” refers to the innovation of business models, which is crucial for the sustainability improvements that ESG reports should report on. We argue that the concept of ESG (environmental, social, and governance factors) and sustainability cannot be fully understood without taking into account these underlying business model innovation efforts of companies. We discuss the importance of understanding how ESG issues related to a company’s business model, and the need to understand what changes and innovations a company is making to improve its social, environmental, and economic outcomes for its stakeholders. We shed light on these issues by means of practical illustrations of business model innovations for sustainability and how they are reflected in ESG measurement and reporting. In doing so, we contribute to the understanding of how business model innovation relates to the measurement and reporting of material ESG factors.

## **INTRODUCTION**

The concepts of ESG and sustainability have become omnipresent in contemporary business, accounting, and finance. And as pointed out by Alex Edmans (2023: 3) in a recent piece, “*ESG is both extremely important and nothing special,*” meaning that the environmental, social, and governance factors that the acronym refers to have become a mainstream part of how to think about business strategy, performance management and financial analysis alike.

In this paper, we will argue that you cannot spell ESG without I. Here, the letter “I” refers to innovation, and in particular – business model innovation. We are going to argue that when talking about ESG, or when trying to take ESG seriously in matters of business, accounting, and finance, an understanding of the underlying innovation efforts of the company is crucial.

The field of ESG is often referred to as an alphabet soup, since it contains a plethora of acronyms: ESG, GRI, CSRD, ESRS, CSR, SASB, TCFD, and so on. This alphabet soup, referring to the many different entities, institutions, standards, and so on in the field of corporate sustainability, can sometimes be a little bit confusing. Why, then, are we putting another letter into the mix? What do we gain from adding the “I” of innovation to the “ESG” of environmental, social, and governance factors that influence the decisions of companies and their stakeholders? We will argue that the nature and consequences of these environmental, social, and governance issues cannot be properly understood without taking the companies’ innovation efforts seriously. Because underlying the improvements in ESG performance that big and small companies, whether startups or incumbents are trying to achieve today, there are innovation efforts and more specifically, business model innovation efforts. And the ESG performance of the companies is a reflection of the quality and efficacy of these innovation efforts.

We are going to argue that to properly understand the ESG performance of a company – whether we are users of information in a sustainability report, like an investor questioning whether or not to invest in a firm, or a policy maker or regulator looking at a company and its footprints from the outside – we do not only want to understand the environmental, social, and economic footprints of the company. We also want to understand, crucially, how these footprints relate to the business model of the company. Moreover, we want to understand what changes and innovations the company is trying to make to this business model, so as to improve these social, environmental, and economic outcomes for the company itself and for its stakeholders.

The remainder of this paper proceeds as follows. First, we bring together ESG and sustainability on the one hand and business models and the innovation thereof on the other hand. In doing so, we shed light on the importance of the “I” in ESG. Next, we discuss the importance of the business model and business model innovation for the measurement and reporting of ESG. In doing so, we discuss the centrality of materiality and tensions between different approaches to materiality for ESG measurement and reporting. Thereafter, we illustrate these issues by means of a specific case of a Norwegian fast-moving consumer goods company and its innovation efforts to improve on material ESG factors. Finally, we conclude and point to the need for further research.

## **ESG AND BUSINESS MODEL INNOVATION**

We take the business model as a point of departure for our attempts to put the I into ESG. The business model, of course, is a phenomenon that stands on its own feet outside sustainability and ESG. Business models and business model innovation (BMI) have become a core topic in the management literature in recent years, and also in the field of sustainability, the conversation is increasingly focused on so-called business models for sustainability (Schaltegger et al. 2016) or sustainable business models (Bocken et al. 2014). Central to this attempt to integrate sustainability into business models is an emphasis on identifying, prioritizing, and managing the company’s most important footprints. Thus, its externalities are seen as the starting point for conversations about ESG performance and the innovation efforts to improve such performance.

The business model can be thought of as the story of how the company works, or more formally: the architecture of how the company creates, delivers, and captures value (cf. Jørgensen & Pedersen 2018). That is, business models comprise the choices of how the company creates value for its customers by means of products and/or services, the delivery of this value by means of key resources, activities, and partners, and the manner in which the company captures value from these transactions to become (and remain) profitable (see Figure 1).

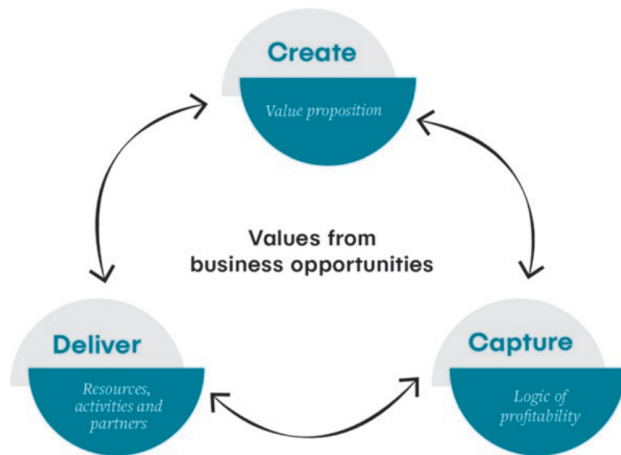


Figure 1: The business model (Jørgensen & Pedersen 2018)

Importantly, however, the business model is not just a good starting point to understand how companies (try to) become profitable. It can equally serve as a starting point to understand their footprints along social and environmental dimensions. Because the business model design choices of a company translate into footprints. When clothing companies choose a “fast-fashion” business model, they almost by design run into challenges related to SDG8: Decent work and economic growth. Because when the profitability logic of the business model is so tied up in low-wage production in the supply chain, the risk of human rights violations and poor working conditions naturally follows. Similarly, consumer goods and retail companies are often trapped in a “volume over value” challenge, since their business models rely on ever-increasing amounts of products sold, oil and gas companies have almost endemic emissions-related challenges, and so on. By looking at the business model choices of a company, we can quickly draw inferences about the social and environmental footprints – both positive and negative – that follow. And often, these central and important externalities should be the starting point for the company’s innovation efforts. In order to improve on these ESG factors, then, business model innovation is often needed.

Now, one might ask why readers of a sustainability report should care about a company’s innovation efforts and not just about its footprints. To address this question, let’s have a look at a concrete example: the business model and sustainability footprints of the brewery Carlsberg. If we look at the comprehensive ESG report of Carlsberg (2022), it starts out with an account of what the basic business model of Carlsberg looks like. As you continue reading the account of the company’s positive and negative ESG footprints, as well as the governance structures that are trying to help the company achieve its financial, environmental, and social objectives, we see that all of this is flowing out of the basic business model characteristics of Carlsberg, from sourcing to brewing, distribution, sales, and marketing, and of course, the consumption of its products.

The company’s main product – beer – has some clear upsides, but of course, from both environmental and social standpoints, it has some very clear downsides. These are well-accounted for in the report, but the report also does two more important things. First, it clearly accentuates the most important – or, in the language of ESG – the most *material* ESG

issues for Carlsberg. Second, it sheds light on the most important innovation efforts underlying the company's progress in improving on these material factors. This includes efforts to conserve water along the entire chain of supply and production in order to deliver on the prioritized sustainability objective "Zero Water Waste", the embrace of regenerative farming practices to deliver on the sustainability objective "Zero Farming Footprint", and so on. For interested readers, we encourage you to pick up Carlsberg's most recent ESG report and have a look at how the business model serves as a point of departure for the company's entire account of what its footprints look like and the efforts being done to improve along those performance dimensions.

In one sense, this is really nothing new. For a long time, we have been talking about the importance of business models for sustainability performance. But as the Carlsberg case illustrates, the business model is increasingly becoming a focal point for the identification, prioritization, management, measurement, and reporting of sustainability performance. This approach emphasizes the importance of putting a company's innovation efforts and changes to its business model at the core of the understanding of its ESG performance. By examining the business model, and more importantly, efforts to innovate the business model, we gain insight into how companies strive to create more sustainable, environmentally friendly, and socially responsible practices while maintaining profitability.

In sum, then, the integration of the "I" of innovation into ESG practices and assessments is essential for properly understanding and evaluating a company's sustainability performance. It highlights the critical role that business model innovation plays in driving improvements in environmental, social, and governance outcomes. By putting innovation at the front of ESG conversations, we are well-positioned to assess and support companies in their journeys toward combining sustainability and profitability. Let us then move on to consider how this relates to the measurement and reporting of ESG performance.

## **BUSINESS MODELS, ESG, AND REPORTING**

While far from all sustainability reports begin with an account of the company's business model, more and more companies are moving in this direction. Moreover, standard-setters are pushing in the same direction. The EU's new Corporate Sustainability Reporting Directive (CSRD) requires reporting on the company's business model. And when we examine some of the key institutions and players in the field of sustainability reporting and sustainable finance, we can see that an emphasis on business model innovation has been present for some time.

For instance, in the conceptual framework of the Sustainability Accounting Standards Board (SASB), which has since been merged and consolidated into the IFRS Foundation, five dimensions of sustainability are outlined as pillars of sustainability. These dimensions include environment, social, human capital, social capital, leadership, and governance. But the fourth dimension in the framework is *business model and innovation*. The SASB described this as a key element of sustainability because it relates to the impact of sustainability issues on the innovation and business models of a company. Specifically, the integration of environmental, human, and social issues into the value-creation processes of the company is emphasized.

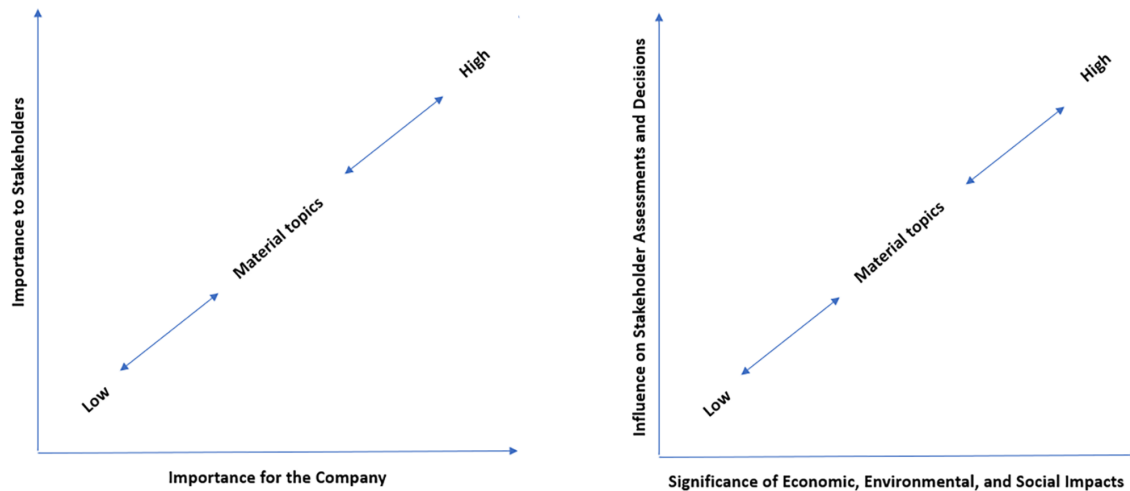
In this regard, several aspects are pointed out, such as product innovation for responsible resource usage and waste minimization, as well as how the company manages its tangible assets like physical resources, and its financial assets, which are all influenced by sustainability issues. When considering the sustainability footprints of the company from a business model standpoint in this way, the concept of materiality becomes central. As noted above, assessing ESG performance is not just about identifying sustainability impacts, but also prioritizing between them when choosing how to manage them by means of various sustainability efforts. To conduct such prioritization, companies increasingly use materiality assessments to distinguish between more and less material sustainability issues.

Materiality assessments are central to ESG and they serve several purposes. In accounting and finance, the value relevance of material sustainability information has been demonstrated (see e.g. Khan et al. 2016), and for this reason, materiality has become increasingly important for investment purposes. However, as pointed out by Forstater et al. (2006: 6), the approach to materiality in the field of ESG has been “stretched beyond sustainability reporting to mainstream accounting and reporting, strategy development and performance management.” Thus, practices related to materiality assessment bridge strategy, stakeholder management, performance management, and reporting in a reiterative process by which material sustainability issues are identified, prioritized, managed, reported on, and reviewed.

In this sense, this broader understanding of materiality reflects the overarching message of this paper. The process of materiality assessment allows for the identification and prioritization of the most important sustainability footprints that follow from the company’s business model design choices, i.e. it relates to strategy formulation and business model design. Furthermore, however, as companies carry out efforts to manage and improve on these material sustainability issues, and in turn measure and report on those efforts, engagement with stakeholders is key. This stakeholder engagement allows for a review of the materiality assessment and the efficacy of the company’s efforts to respond to stakeholder concerns. Such *dynamic* assessment of materiality takes into account the potentially growing or falling importance of various sustainability issues for the company and its stakeholders (Serafeim & Yoon 2022). From an innovation perspective, dynamically attending to sustainability issues of growing or diminishing importance is important in order to allocate time, attention, and resources to the right sustainability efforts.

The process of materiality assessment is, however, complicated by the fact that the concept is used in different ways. In recent years, there has been a certain tension between two different concepts of materiality in the field of sustainability. In a paper we recently published together with our colleague Aksel Mjøs, we discussed the tensions between the two concepts of materiality (Jørgensen et al. 2021). If we think of materiality assessment in a two-dimensional matrix, as illustrated in the two different matrices in Figure 2, the source of the tension relates to the x-axis of the matrix. One concept of materiality, which is associated with the SASB approach to materiality, takes an “outside-in” perspective, i.e. it emphasizes *which sustainability issues impact the business performance of the company*. In Figure 2, this is shown in the matrix on the left, in which the x-axis refers to sustainability issues that are important for the company. Another widespread concept of materiality, however, often associated with the GRI framework, rather takes an “inside-out” perspective, and emphasizes *the sustainability issues for which the company’s economic, environmental, and social impacts are most significant*. This is illustrated

on the left hand of Figure 2. For both of these approaches, the y-axis refers to the sustainability issues that are important for stakeholders.



*Figure 2: The materiality matrix from outside-in and inside-out perspectives (Jørgensen, Mjøs & Pedersen 2021)*

Of course, depending on whether you assume an impact-oriented (“inside-out”) or a company-oriented (“outside-in”) perspective on the x-axis, you might arrive at quite different conclusions with regard to which issues are most material. From an investor perspective, it is easy to see why this matters greatly. But one may question why this distinction should matter from an innovation point of view.

As discussed above, when we talk about materiality in the context of sustainable business, it relates to the whole path from strategy formulation to sustainability reporting and back. Materiality helps companies in identifying more and less material sustainability issues and prioritizing between them. From a strategy and innovation perspective, the process of materiality allows companies to distinguish between sustainability issues that urgently need to be dealt with and those that are perhaps slightly less important. Importantly, however, from a company standpoint (as opposed to an investor standpoint), the rationale for considering sustainability issues as material might be more varied, i.e. they can be both based on “outside-in” and “inside-out” logic (in line with so-called “double materiality”, cf. Jørgensen et al. 2021).

That is, a company might choose to prioritize sustainability issues even when there is no business case to expect that they will improve business performance in the short to medium term. Instead, it could for instance be that the company assesses the sustainability impacts related to this issue to be so significant (cf. the “inside-out” perspective), that it should prioritize it. This can be either to appease stakeholders, to act in line with corporate values, or other impact-oriented reasons that are different from the business-performance reasons of the “outside-in” perspective.

These strategy and innovation considerations of course also trickle down to measurement and reporting. Users of information both inside and outside the company rely on relevant, high-quality data into the company’s most material sustainability issues. This is as important for

the companies' ability to track their own progress in trying to improve on material sustainability issues as it is for external users of information like investors trying to use ESG information in investment decisions or regulators trying to make regulatory decisions based on the ESG performance of companies in a given industry.

Thus, materiality plays a key role in the identification, prioritization, management, measurement, and reporting of sustainability issues. It establishes a clear link between strategy and innovation as it relates to sustainability issues on the one hand and the measurement and reporting both for internal purposes and external purposes of those footprints over time. And the business model serves as the nexus around which these ESG practices revolve. As a final illustration of the role of business model innovation in ESG, let us consider a case. It sheds light on the business model innovation efforts of a large fast-moving consumer goods company faced with the expectations of improvements on a highly material sustainability issue.

### **AN ILLUSTRATION OF “ESG AND I”: THE CASE OF PLASTIC PACKAGING**

The case in question illustrates the comprehensive and often complex innovation processes that lie behind any single number one can find in an ESG report. When opening an ESG report, we like to believe that the numbers are telling us something essential about the important footprints of the company in question, the magnitude of those footprints for better or worse, but also the progress being made by the company over time in managing and improving on those footprints. This holds whether one is considering waste management practices, efforts to safeguard against human rights violations in supply chains, or improving biodiversity outcomes – all of which will be reflected in quantitative and qualitative information in an ESG report.

The case we will shed light on is part of a research and innovation project that our research team has been working on for the last five years in close collaboration with Norway's largest consumer goods company Orkla. The backdrop was the company's increasing expectations towards reducing its plastic footprint, in particular, related to single-use packaging for home and personal care products such as soaps, shampoos, and so on. Packaging in general and plastic packaging, in particular, is considered a material sustainability issue for consumer goods companies, and if you go to the comprehensive ESG report of Orkla, you will find a table outlining performance data related to “sustainable packaging”. Here, the company reports on key indicators such as total packaging consumption, the share of packaging made from renewable materials, and the share of plastic packaging from recycled materials. These numbers give an indication of the current footprint, as well as the trend over time.

But what such a table really isn't telling the reader much about is all the innovation happening “in the background” related to the company's business model. In Orkla, several ongoing business model innovation processes have been developed in recent years in an effort to reduce the plastic footprint of its products. This goes beyond mere packaging design innovation, such as changing from virgin plastic to recycled plastic (which is reflected in the table in question in the ESG report). Instead, it relates to foundational questions about how the company produces and distributes its products while facilitating new modes of consumption among its consumers.

Together with the company, while it was doing incremental product innovations like introducing recyclable plastic, we carried out a series of business model experiments geared toward plastic reduction (see e.g. Jørgensen & Pedersen 2018; Bashir et al. 2020). Together with the company, we tested refill stations in retail stores to investigate if people were willing to go to the store and refill their old plastic bottles. Similarly, we tested a collaborative business model with home-cleaning companies, who refilled soap on consumers' existing containers while coming to their homes to deliver cleaning services.

At the end of last year, however, the company took a large step ahead in its innovation efforts to reduce plastic packaging. It decided to launch a new venture called *På(fyll)* (which literally translates as *Re(fill)*). The new venture has developed a generic, refillable packaging solution for home and personal care products, which is sold on a subscription basis. Consumers communicate with the company through an app, and products are delivered to the customers' homes in durable, refillable containers that remain in Orkla's ownership. This implies that the refillable containers are picked up and brought back by the company, thus rendering single-use packaging unnecessary. The solution is reminiscent of other international ventures such as Loop and reflects an awareness in the global consumer goods industry that it needs to address and reduce its negative impacts with regard to excess packaging and the emissions and pollution following thereof.

We provide this glimpse into the innovation efforts of Orkla not for the sake of soap or the company, but to shed some light on the comprehensive innovation efforts that lie behind the dry and simple numbers that we see in the ESG report. And as illustrated by this case, the numbers in the ESG report only give limited insight into what these efforts look like, what they require, and the degree to which they are likely to yield more substantive improvements going forward.

What we are therefore arguing is that users of information who read ESG reports often do not get insight into these business model innovations that are potentially driving future improvements in ESG performance. This makes it harder to understand the conditions under which progress in ESG performance is happening, and how likely the company's sustainability efforts are to be successful going forward. Is the company only making small, incremental steps, or are there indications of more comprehensive business model innovations that would – for instance, in this case, give the belief that the company's plastic footprint could become much lower than it is today?

## **CONCLUDING REMARKS AND AVENUES FOR FURTHER RESEARCH**

In this paper, we have argued for the centrality of business model innovation for companies' sustainability improvements. Moreover, we have argued that in order to fully account for companies' ESG performance, such innovation efforts need to be reflected also in their ESG reporting. In that way, users of the information in such reports can get insight into the underlying innovation efforts that can be indicative of future sustainability improvements on part of the company. For this reason, we have argued that you cannot spell ESG without I.

Needless to say, the critical sustainability reporting scholar could posit that properly accounting for the business model innovation efforts of companies leads to excessive disclosure and that



ESG reports can consequently become too bloated. Furthermore, there might be concerns about which form such information should take, and if it is possible to disclose it in a relevant and reliable manner. And indeed, this is perhaps the kind of information that needs to remain a little bit more qualitative in ESG reports. However, if we look at all the sustainability improvements that firms are doing, many of them are incremental. When starting to make incremental sustainability improvements, the company can typically pick low-hanging fruits and continue to make incremental progress for a period of time. But after a while, improving incrementally typically becomes more difficult, and in order to improve further, more radical shifts in the business model become necessary.

From the point of view of a user of ESG information, then, it can be important to know if the numbers in the ESG report are reflective of incremental improvements, or more fundamental changes to the business model. From the point of view of companies issuing ESG reports, they need to consider which innovation efforts might materially concern investors and other stakeholders, and how such efforts might be accounted for in a suitable way in their reporting. How can companies inform users of ESG information about such innovation efforts so that they can properly assess the company's efforts to become both sustainable and profitable?

In sum, we are arguing here that improving ESG performance more than incrementally usually requires business model innovation. Therefore, ESG requires I, and ESG reporting should similarly be reflective of the "I" of innovation. We have argued that materiality assessment is crucial for tying together ESG and business model innovation, from strategy and innovation on the one hand to measurement and reporting on the other hand. In order to take the I of ESG seriously, however, more research is needed into the manner in which business model innovation efforts can best be disclosed in ESG reports. Here, various practices for such disclosure and the manner in which they are perceived by various users of information should be investigated. Furthermore, the conditions under which users of information are able to infer decision-useful information about underlying business model innovation efforts are also needed. Finally, there is also a need for more investigation into how materiality judgments by various users of information are done in relation to information about the companies' business model innovation efforts for sustainability.

View the associated Accounting for Sustainability and Responsible Investing conference Academic Spotlight [here](#).

[Lars Jacob Tynes Pedersen](#), Professor, Department of Accounting, Auditing and Law, NHH Norwegian School of Economics. Twitter: @LJTPedersen

[Sveinung Jørgensen](#), Associate Professor, Department of Accounting, Auditing and Law, NHH Norwegian School of Economics. Twitter: @ungJorgensen