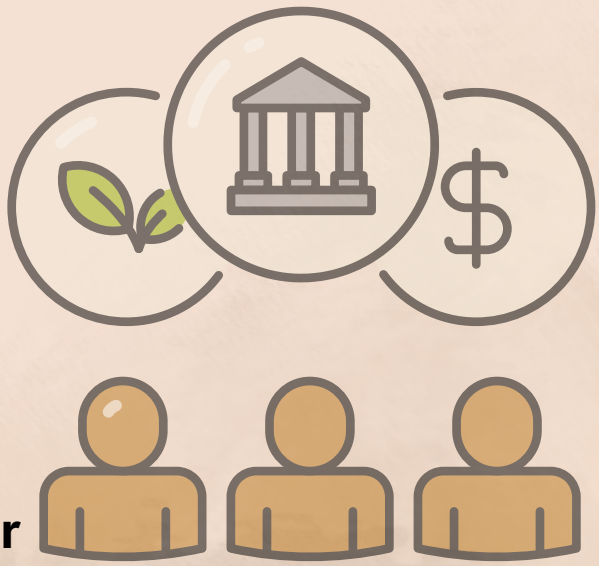
ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) FACTORS AND GREEN PRODUCTIVITY

The Impacts of Greenwashing and Competence Greenwashing on Sustainable Finance and ESG Investing



Prof. Dr. Kim Schumacher

Productivity *Insights* **Vol. 2-11**

Asian Productivity Organization

The Asian Productivity Organization (APO) is an intergovernmental organization that promotes productivity as a key enabler for socioeconomic development and organizational and enterprise growth. It promotes productivity improvement tools, techniques, and methodologies; supports the National Productivity Organizations of its members; conducts research on productivity trends; and disseminates productivity information, analyses, and data. The APO was established in 1961 and comprises 21 members.

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PREFACE

The P-Insights, short for "Productivity Insights," is an extension of the Productivity Talk (P-Talk) series, which is a flagship program under the APO Secretariat's digital information initiative. Born out of both necessity and creativity under the prolonged COVID-19 pandemic, the interactive, livestreamed P-Talks bring practitioners, experts, policymakers, and ordinary citizens from all walks of life with a passion for productivity to share their experience, views, and practical tips on productivity improvement.

With speakers from every corner of the world, the P-Talks effectively convey productivity information to APO member countries and beyond. However, it was recognized that many of the P-Talk speakers had much more to offer beyond the 60-minute presentations and Q&A sessions that are the hallmarks of the series. To take full advantage of their broad knowledge and expertise, some were invited to elaborate on their P-Talks, resulting in this publication. It is hoped that the P-Insights will give readers a deeper understanding of the practices and applications of productivity as they are evolving during the pandemic and being adapted to meet different needs in the anticipated new normal.

INTRODUCTION

According to the Intergovernmental Panel on Climate Change [1], the finance sector plays a key role in addressing the ongoing climate crisis and natural resource issues, including the intensifying destruction of forests, and the resulting biodiversity pressures. In the wake of the adoption of the UN SDGs and Paris Climate Agreement in 2015, high-level stakeholders from the financial sector have set up a plethora of bodies to develop industry guidelines that take account of climate-related risks and integrate environmental, social, and governance (ESG) factors across financial decision-making. Thereby, the financial sector plays a central role in directing funds toward sustainable development and green growth. It does so not merely out of altruism but out of self-interest. Similar to the financial crisis of 2007–08, also known as the mortgage crisis or the Lehman Brothers shock, environmental and climate risks pose a significant threat to the global financial system and the economy at large. Global finance sector-related initiatives, including the Taskforce on Climate-related Financial Disclosures (TCFD) and the Network for Greening the Financial System (NGFS) were established to understand and ideally mitigate the intensifying risks around issues such as anthropogenic climate change, ecosystem decline, and biodiversity loss.

In order to render the financial system, and by extension the economy, more resilient against these emerging threats, while at the same time identify opportunities, numerous policy instruments, risk management frameworks, and data solutions have been developed or proposed over the past several years. Sustainability reporting and ESG investing are among the most frequently mentioned approaches and strategies in order to foster more transparency around the risks and impacts of financial institutions and corporations and use corporate ESG performance data to divert financial flows toward those companies less exposed to ESG-related risks and more aligned with the SDGs or the planetary boundaries.

Green fixed-income securities, more commonly known as green bonds, represent a rapidly growing financial asset class that aspires to take account of ESG data and then use the corresponding proceeds to fund sustainability-aligned projects. Several large development finance institutions (DFIs) were

at the forefront of mainstreaming green bonds, of which many different types exist, including but not limited to climate bonds, social bonds, SDG bonds, and blue bonds, just to name a few [2]. These products are set up in accordance with specific sets of rules regarding their use of proceeds, and impact measurement, reporting, and verification (MRV). In most instances, green or ESG-related financial products, including green bonds, are theoretically earmarked for certain sustainability-linked or ESG-aligned projects, assets, or activities (PAAs) and thus should exclude incompatible activities and projects such as carbon-intensive fossil fuels (E), those that violate human or labor rights (S), or where management is involved in corruption-related controversies (G). Other emerging financial products that are aiming to integrate ESG factors are sustainable funds, climate-aligned ESG indexes, or sustainability-linked bonds.

The key underlying concept behind ESG-related practices and instruments, including sustainability reporting, sustainable funds, and green bonds, is materiality. It pertains to the idea that all stakeholders, which range from governments, institutional investors, and corporations to civil society, affected by climate change and other socio-environmental issues should have access to relevant or material information in order to base their economic, financial, and personal decisions on both PAA-related risk-level and impact-level data. Risks and impact MRV should provide them with the necessary data to identify good and bad sustainability performers. Material data include not only pure financial risk data but also broader ESG impact data. The data should also comprise social capital data, which reflects an organization's or company's capacities to properly carry out ESG-related MRV tasks, which again represent the foundations for adequate sustainability reporting, and ESG data transparency.

Unfortunately, among many financial-sector and corporate stakeholders a large disconnect can be observed between their positive sustainability performance claims and the organizational resources and capacities dedicated to assuring proper ESG impact MRV. These discrepancies can easily result in greenwashing, which is the practice of marketing products or services as "green" or "sustainable" when in fact they do not meet basic environmental or sustainability standards of verifiability or credibility. However, greenwashing and some of its subvariants like "carbonwashing" or "competence greenwashing" do not occur in a contextual vacuum but are strongly linked to the increasing appeal of sustainable finance, ESG investing, and the strong green growth they are

supporting. Therefore, this paper will first illustrate recent green growth trends in the areas of sustainable finance and ESG investing before exploring how greenwashing and subject matter expertise-related competence greenwashing have been growing alongside those trends.

THE ECONOMIC RELEVANCE OF SUSTAINABLE FINANCE AND ESG INVESTING

The UN Commission on Trade and Development (UNCTAD) estimates that meeting the SDGs will require USD5 trillion to USD7 trillion in investment each year from 2015 to 2030 [3]. While government spending and development assistance will contribute, they are expected to make up no more than USD1 trillion per year, so new flows of private-sector capital will be key, either through new allocations or by rerouting existing capital flow [3].

Since 2012, total assets in sustainable investing have more than doubled from USD13.3 trillion to USD35.2 trillion [4]. UNCTAD [5] has documented the fundamental growth of the sustainable finance and ESG investing sectors, which should equate to a corresponding level of overall green growth. For example, between 2010 and 2021, the volume of sustainable funds increased from 1,304 to 5,932, and sustainability-related assets under management from ca. USD195 billion to USD2,744 billion. Furthermore, the Global Impact Investing Network (GIIN) [6] estimates that the impact investing market, which is part of sustainable finance, now exceeds USD1 trillion.

These figures in combination with a number of studies, notably by Friede et al. [7], have proven that ESG investing generates superior financial performance. Furthermore, several studies, including by Lau et al. [8], have confirmed the existence of a "greenium," which specifies the improved financial conditions that green financial products enjoy versus their conventional peers, notably in terms of loan-level interest rates, bond spreads, or fund-level investor inflows, albeit to varying degrees.

CHALLENGES TO ESG MAINSTREAMING

General Greenwashing

In and Schumacher [9] showed that this rapid growth has led to concerns among an increasing number of academics, legislators, regulators, and industry stakeholders, who have identified a growing number of greenwashing or carbonwashing risks in recent years. Greenwashing corresponds to the practice of labeling or marketing products and services as having positive environmental impacts or sustainability benefits when in fact there are not enough evidence, data, or capacities to substantiate any ESG- or sustainability-related claims in a reliable or credible way. Carbonwashing is the climate-related practice of presenting carbon footprints in overly positive ways without solid evidence.

The issues of greenwashing and carbonwashing, its climate action and greenhouse gas (GHG) emission-related counterpart, have been increasing in concordance with the general growth of the sustainable finance sector and ESG investment markets. Therefore, if left unaddressed, they risk undermining the very foundations of sustainable economic growth, Green Productivity (GP), and the transition to a net-zero society. It constitutes a GP risk as it suggests non-existent gains or immaterial improvements in the areas of environmental technology innovation, regulatory efficiency, supply-chain streamlining, or corporate governance, potentially resulting in societal complacency or stakeholder inaction regarding urgent or existential sustainability issues. One of the primary enabling factors of greenwashing is the absence of globally applicable uniform standards and frameworks of what constitutes a genuine sustainable investment and what "ESG-aligned" signifies. In the search for additional clarity and guidance, regulators, corporations, and finance practitioners have been looking toward sustainability disclosures and ESG data.

This growing reliance on corporate sustainability disclosures and ESG data has increasingly been exposing the financial and corporate sectors to a number of fairly novel risks linked to non-financial capacity gaps, the lack of ESG data

MRV, and asymmetries in access to sustainability information. These persistent data gaps and sector-wide inconsistencies in terms of ESG impact MRV data have created numerous materiality blindspots. Sustainability data, the key pillar of ESG ratings, remains largely self-assessed. Berg et al. [10] identified inadequate data as one of the key reasons, besides often opaque rating methodologies, that ESG ratings remain highly inconsistent and diverging. In combination with an overall lack of data granularity, it does not currently permit the drawing of any reliable and objective conclusions on ESG-related key performance indicators.

Key global jurisdictions and governments, most notably the EU, have started to adopt laws to regulate multiple aspects of sustainable finance and ESG investing. The main aim is to prevent greenwashing and promote genuinely sustainable economic growth underpinned by corporate and financial systems that help promote climate change mitigation, adaptation, transition to a circular economy, and pollution prevention, as well as the protection of water resources, biodiversity, and ecosystems.

One of the central regulatory pieces is so-called taxonomy, a uniform classification system for sustainable activities. In combination with new rules on sustainability-related financial disclosures, corporate sustainability reporting, low-carbon benchmarks, and green bonds, the EU wants to lower ESG-related risks to the financial system while at the same time promote sustainable growth and GP.

Competence Greenwashing

These regulatory developments, which are also introduced or considered in similar form in numerous other jurisdictions, have created an immense demand for experts with ESG-related skillsets [11]. However, the areas of climate, biodiversity, nature, or water require high degrees of scientific or technical expertise. Sustainable finance and ESG investing-related operations deal with large amounts of non-financial data and scientific performance metrics, such as GHG emissions, biodiversity loss, hydrology, atmospheric science, marine biology, pedology, or zoology. However, despite the increasingly science-driven and evidence-based regulatory requirements, the areas of sustainable finance and ESG investing continue to be heavily dominated by people with primarily financial, business, management, commerce, social science,

marketing, communications, or humanities backgrounds. Comparatively few of those currently active in this space, especially at the higher levels of management, have natural science backgrounds. Many practitioners with these more traditional marketing, corporate governance, and financial backgrounds are now seeking ways to transition into ESG roles as there is a high demand for ESG experts and sustainability specialists across the entire global job market at the moment.

Schumacher [12] first described the major risks with this skill transition as "competence greenwashing," the practice of equating immaterial ESG knowledge, basic sustainability awareness, or passion for ESG-related issues with subject matter expertise. Completion of one of the numerous short-term certificates on ESG and sustainability, or participation in a sustainability leadership course, should not lead to practitioners relabeling themselves as climate, ESG, or sustainability subject matter experts. One example is the recent news that Japanese climate experts proposed a national "transition taxonomy" for finance. As none of the involved "experts" had a background in natural science, the robustness of the climate science in the proposed framework mandates additional scrutiny. Another example is the framing and marketing around the multiple introductory sustainability certificates.

Many organizations tracking ESG data from companies, including the Carbon Disclosure Project (CDP), Climate Bonds Initiative (CBI), and Science-based Targets initiative (SBTi), often struggle to independently verify all of the submitted corporate data. Therefore, such organizations as well as companies and financial institutions increasingly rely on private ESG service providers, including rating agencies, independent verifiers, auditors, or data aggregators to provide data, scores, ratings, second-party opinions, or verifications of their compliance with ESG standards and regulations. This remains an area for improvement since independent audits, assessments, and verifications are still seldom performed by subject matter experts with natural science backgrounds. Furthermore, the fact that the proprietary methodologies to assess, measure, report, and verify ESG alignment of investments or companies are often not disclosed publicly can lead to a variety of issues in terms of the following:

- Transparency and accountability: Many of the methodologies are simply not disclosed in full, with intellectual property rights being cited as the most common reason. This risks undermining objective

assessments of the scientific robustness of ESG rating methodologies and renders credible ESG risk, performance, and impact data collection very difficult.

- Data quality and quantity: The ongoing absence of globally uniform corporate reporting standards and the self-assessed nature of the majority of ESG data sources, notably corporate reports and industry questionnaires/surveys, lead to widely differing datasets across companies, even in those from the same sector and for identical metrics or indicators, such as CO_2. Without proper transparency in terms of raw data and data evaluation, any ESG risk and impact results can be interpreted differently, opening the door for positive bias and overstatements in terms of green- and ESG-related achievements.

- Inconsistency: Transparency issues are amplified and often rooted in human resource gaps, notably the lack of sector-level experts, both in terms of quality and quantity of the latter. The current capacity-level gaps risk facilitating inconsistencies as numerous stakeholders within the sustainable finance and ESG investment ecosystems, including ESG service providers, corporate ESG and sustainability departments, and auditors and assurers, compensate for the economy-wide lack of reliable, objective ESG data via subjective analysis. While this can be a useful instrument to gain more differentiated expert-level insights into complex topics, any knowledge of either internal or external sustainability or ESG experts needs to be material. This matters as different approaches toward materiality and life-cycle analysis could result in fundamentally diverging ESG ratings for companies or investment portfolios, with a good example being the EV sector [13].

With key players such as asset managers, auditors, and consultancies expanding their ESG, climate change, or sustainability teams, a lack of experts with material expertise constitutes one of the most fundamental risks to green growth as there is a risk that improper MRV could lead to a largely virtual green growth, meaning that any observed progress is the result of positive impact overstatements and negative impact understatements. The industry-wide lack of material ESG expertise and granular knowledge around the complexity of sustainability issues, especially in the "E" category, should be a red flag in terms of the scientific robustness of any ESG review.

General greenwashing in the sustainable finance, ESG investing, and corporate sustainability areas, which are hampering green growth, are thus directly linked to competence greenwashing. Again, competence greenwashing pertains to the practice of claiming sustainability- or ESG-related expertise without possessing credible material track records or sufficient education to substantiate any of these claims.

The competence greenwashing aspect is strongly linked to societal expectations around expert-level knowledge, the material demands of any role that a sustainability practitioner or ESG professional is executing, the overall claims made by stakeholders to which the individuals or teams of individuals belong, and the claims made by the ESG product or sustainability service offered for which the individuals in question are fully or partially in charge. The more substantial the sustainability or ESG claims of the product or service, the more material the expertise in support of these claims needs to be, especially for any MRV-related ESG products or sustainability services.

COMPETENCE GREENWASHING

Identification of Current Industry Practices

Competence greenwashing feeds into the overall discussion of materiality in the sustainable finance, ESG investing, and green growth areas. Many practitioner groups that previously were seldom confronted with complex questions around sustainability, including environmental issues such as climate change or biodiversity loss, are starting to be held to more rigid standards that go beyond the mostly marketing-related sustainability activities many financial institutions, companies, and governments previously engaged in.

Examples of more stringent requirements and heightened regulatory expectations for financial and corporate practitioners dealing with non-financial ESG and sustainability matters include various EU frameworks and guidance documents from supervisory authorities. The European Banking Authority (EBA) [14] stated that institutions must develop "adequate internal resources and expertise related to identifying, assessing and managing ESG risks." Under its MiFiD II guidance, the European Securities and Markets Authority (ESMA) [15] highlighted that practitioners advising on ESG-related financial products need the "skill, expertise and knowledge required for the assessment of sustainability risks." Finally, the European Central Bank (ECB) [16] clarified that, "A management body is expected to consider the knowledge, skills and experience of its members in the area of climate-related and environmental risk in its assessment of the collective suitability of such members."

Regarding the non-financial skills of assurers of sustainability reports targeted under the new Corporate Sustainability Reporting Directive (CSRD), the International Auditing and Assurance Standards Board (IAASB) [17] indicated that, "The subject matter competence that may be needed on an EER (i.e. sustainability) assurance engagement may go beyond that ordinarily possessed by most engagement partners. In such a case, it may be necessary to use the work of a practitioner's 'expert' who has specialized skills and knowledge that enable an informed and knowledgeable view on the underlying subject matter."

The double materiality concept in sustainability reporting requires subject matter experts who can cover the entire spectrum of ESG risk and sustainability impact MRV. Many financial institutions and corporate compliance departments count few subject matter experts with substantial and material ESG expertise within their organizations, bar more science, technology, engineering, and math (STEM)-oriented R&D departments or the risk departments of large reinsurers as they have already been monitoring climate and weather risks for a considerable time.

With global green growth agendas multiplying at government levels, and sustainable finance, ESG investing, and sustainability reporting gaining in importance, there has been an immense demand for qualified ESG experts and sustainability professionals. However, as many organizations did not have any significant numbers of in-house sustainability experts and short-term recruiting options for fully trained subject matter experts are limited, the supply–demand imbalance led to various situations:

a) Organizations put someone within their existing managerial structures in charge of sustainability-related issues, often rebranding these positions by simply adding "ESG," "sustainability," "climate," or "environment" to a person's existing job title. Often, these newly designated sustainability "experts" had little to no material sustainability-related track records, and their activities were often limited to communications and marketing.

b) Organizations hired a high-profile "Chief Sustainability Officer," "Head of Sustainability," or "Head of ESG" who were tasked with coordinating an organization's sustainability-related activities with external stakeholders. However, these positions were also often more closely situated within the communications and marketing remit than conducting ESG risk assessments or sustainability impact monitoring.

c) Organizations, boards, executives, and practitioners from, but not limited to, the financial, business, or corporate sectors would seek to upskill by completing one of the many introductory ESG-related certificate or executive sustainability leadership courses that are offered by finance or accounting institutes, banking industry groups, or business schools. While these courses are important instruments in

terms of broadening industry-wide sustainability awareness, they are no substitute for genuine, material ESG subject matter expertise, especially in non-financial areas such as climate change, ecology, and biodiversity.

Still, numerous practitioners start labeling themselves as climate, ESG, or sustainability "experts," "leaders," or "professionals" after having completed one or a few such short introductory courses, which often bear misleading course titles such as "certified expert" or "sustainability leader," blurring the lines of what constitutes substantial sustainability expertise.

d) Organizations, notably financial institutions and corporations with inadequate ESG and sustainability capacities, often rely on external advisory and consulting firms, for which the same competence greenwashing issues, such as immaterial upskilling or job profile rebranding, apply. Many such firms created climate and sustainability service departments, yet the lack of material expertise risks leading to inconsistent or immaterial ESG impact MRVs, which render proper green growth tracking difficult.

Assessing the Contextual Relevance of Sustainability and ESG Expertise

In order to address these issues, it is important to understand the importance of skill contextuality in the areas of ESG and sustainability, as improper evaluations of sustainability-related subject matter expertise or mislabeling of non-financial ESG skills constitute competence greenwashing. This in turn contributes to broader greenwashing and thus represents one of the major risks to any green growth initiatives.

I propose the introduction of a sustainability competence materiality, which is a skill assessment tool that aims at enabling stakeholders such as clients, recruiters, and peers to obtain a better understanding of how relevant the expertise of sustainability practitioners and ESG professionals is regarding a specific subject.

Prior to presenting the materiality matrix, it is important to understand why it is needed in the first place. Numerous studies stated that current financial and corporate leadership lacks basic ESG expertise. For example, a 2022 PwC study [18] documented that many boards still only consider ESG- and sustainability-related matters, such as climate change and biodiversity loss, only to a limited extent, with board capacities, notably in terms of material expertise, representing one of the key barriers.

A January 2021 New York University Stern Business School study by Whelan [19] found that 29% of 1,188 Fortune 100 board members had relevant ESG credentials. The study also appeared to show significant differences in terms of material ESG knowledge depending on the area of expertise, with most of the experience being found under the S, with 21% of board members having relevant S experience, against 6% each for E and G. Regarding E expertise, the study results also indicated that the "experience in energy generally came from people who had background in renewables, nuclear power and utilities, and in land/conservation, individuals who sat on conservation boards such as the Nature Conservancy [19]."

However, one of the main methodological limitations of that study, affecting its overall explanatory value, is the fact that the main ESG expertise metric was looking at "all organizations listed in the bios with whom the board members had had an affiliation and as potential credentials," if they were "national" or "international" organizations, and if they had a significant role "i.e., board member or adviser [19]." This included board members who sat "on large environmental organization boards which work with business, such as WRI" and "youth education programs that brought students directly into the company through internships."

This approach to basing ESG expertise on board or advisory roles of ESG-related nonprofits or NGOs is problematic as it does not address the issue of membership endogeneity, meaning that none of these appointments represent industry stakeholder representation, or even constitute membership with an industry-created organization. Numerous ESG-related organizations and groups have been appearing in recent years that create "expert committees" or "stakeholder groups" around ESG issues such as climate, water, biodiversity, or social issues. Companies and businesses are often invited to send a representative, including board members, to these committees, and hence any

ESG expertise-related research should include additional expertise metrics such as education and employment track records, as volunteer board or advisory activities often represent high degrees of expertise endogeneity, meaning that the mere membership in an ESG-related committee or board is interpreted as having expertise, ignoring the self-serving greenwashing element of these memberships.

For companies, it can be interesting if some members are represented in ESG-related committees, advisory boards, or expert groups, as they will be seen as knowledgeable around the issues discussed. In many instances, however, the material credentials of numerous "experts" on these committees, advisory boards, or expert groups lack materiality regarding the ESG-level target areas. For example, recently, a plethora of nature- and biodiversity-related expert groups have come into existence, such as the TNFD Taskforce Membership. While these committees certainly play an important role in terms of facilitating proper stakeholder input into sustainability- and ESG-related policies and regulatory frameworks, membership does not automatically equate with material sustainability or ESG subject matter expertise.

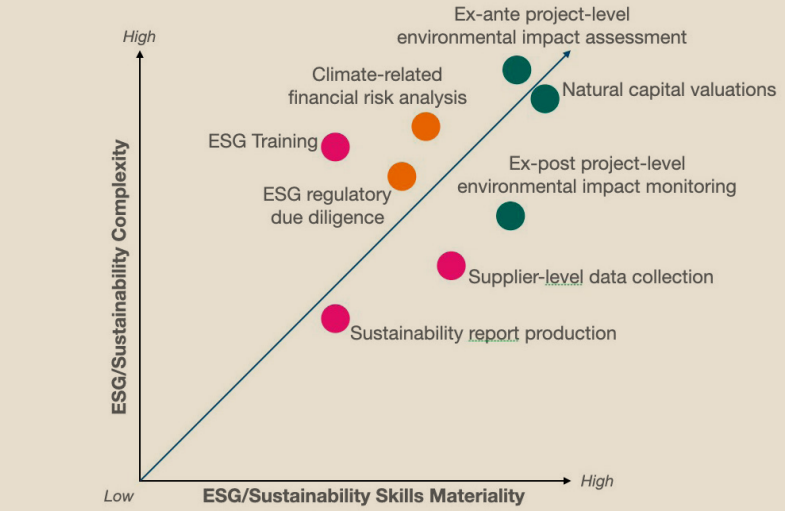
Therefore, in light of the methodological limitations of the existing academic literature on the evaluation of material ESG expertise, this paper serves as the first attempt to propose a novel ESG skill materiality in order to start a wider ESG stakeholder discussion on how to properly assess the relevance and materiality of sustainability- and ESG-related expertise. The high contextuality of sustainability skills demanded and the immense spectrum of ESG-related skills mandate questioning of current competence greenwashing practices in which even immaterial sustainability- and ESG-related skills are often utilized to mislead clients, customers, and society about an organization's true internal ESG expertise and sustainability competence.

The following figures aim at displaying ESG skill demand-side level contextuality (Figure 1) and the corresponding supply-side ESG skill materiality matrix (Figure 2). It is important to note that the ESG skill matrix is not meant to discredit or devalue any skills or educational achievements. It is the first attempt at allowing stakeholders in the ESG sphere, ranging from clients and customers to employers and recruiters, to understand how certain types of sustainability-related skills or expertise match up with the

sustainability claims made for product or service levels and the situations or contexts that are being managed. Figure 1 highlights the complexity of certain sustainability-related situations and the corresponding knowledge. The greater the complexity, the higher the level of expertise required. Some situations will require a mix of E, S, and/or G competence, which would usually be addressed by an interdisciplinary team or through external experts. Figure 1 lists some ESG- and sustainability-related activities and indicates which skills would be most material to address the complexity of the respective tasks. Figure 2 then attempts to propose an ESG skill materiality matrix providing a subjective assessment of educational and professional development achievements and to what extent they could be considered material to the selected ESG areas.

FIGURE 1

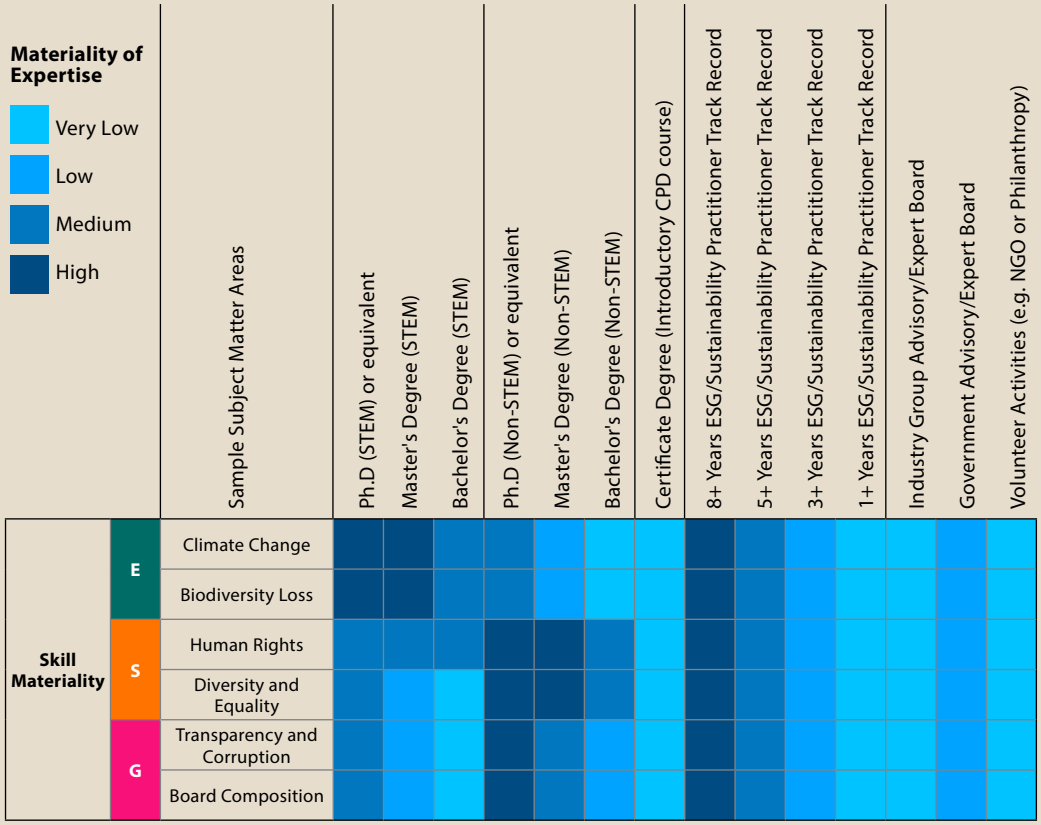
ESG SKILL DEMAND-SIDE LEVEL CONTEXTUALITY.



Source: Produced by the author.

FIGURE 2

ESG SKILL MATERIALITY MATRIX.



Source: Produced by the author.

CONCLUSION

Additional Pathways to Strengthen the Integrity and Scale of ESG Investing

Regarding general greenwashing in sustainable finance and ESG investing, a mandatory public-blind peer review by sector-level experts could be a useful instrument. Academic publishing already offers an amply tested template for high-quality, peer-based scientific reviews, and the involvement of scientific publishers would guarantee a smooth operational structure. Sustainable finance needs to become more transparent, evidence-based, and accountable, and the creation of a truly independent, expert-assisted blind peer-review process of ESG-related data ex ante and ex post would help move the financial sector toward a truly sustainable, science-based model.

More regulatory oversight would also apply to competence greenwashing, even though the concept is still relatively novel since its introduction in February 2020 by Schumacher [12] in Responsible Investor. However, it is gaining momentum as it truly represents a massively underexplored yet extremely powerful indicator for general greenwashing risks across the increasingly influential and rapidly growing sustainable finance and ESG investing industries.

Unfortunately, many of the world's ESG frameworks and national sustainable finance strategies and frameworks still do not sufficiently address the disconnect between professional ESG competence claims and the realities around the material expertise gaps of many so-called ESG experts. Sustainability credentials should not be placebos for problems organizations hope to work out over time. They should be based on scientific practices: measurable; reportable; and verifiable.

From many established finance sector practitioners with more traditional educational backgrounds, such as business, management, economics, communications, law, and international relations, there is a lot of push-back against the competence greenwashing concept. Some say that it is just gatekeeping by natural scientists and sustainability practitioners to keep

finance and management experts out of the ESG space. However, looking at industry-level surveys, it appears that the share of non-financial ESG subject matter experts, including natural scientists and STEM experts, remains comparatively small among financial institutions.

This should be of concern to the integrity of ESG products, because as the multiplying instances of greenwashing show, the growth of the sustainable finance sector lacks proper ex-post facto impact verification of its additionality in terms of sustainability indicators. Without genuine non-financial subject matter experts, the finance sector will struggle to transition to a sustainability-aligned business model. Only a few ESG claims of sustainable finance products can be considered credible if actual non-financial ESG experts are not actively integrated throughout all organizational decision-making and operational governance levels. Otherwise, green growth, sustainable finance, and ESG investing risk becoming nothing more than business-as-usual with a green coat of paint.

There are examples such as ongoing investigations into potential misrepresentation cases around the overstating of ESG capacities of fund managers, asset managers, and financial institutions. One could imagine an "ecosystems restoration" fund where fund managers seem to have no visible or very limited track records in ecosystem services, environmental science, biodiversity, ecology, zoology, natural capital, or biology.

Some established finance and management practitioners argue that you do not need those skills to manage such a nature-related fund. From a scientist's perspective, it is hard to be convinced how merely completing a short online ESG certificate course or an introductory sustainability leadership course could result in becoming a genuine nonfinancial subject matter expert. There are no shortcuts to sustainability or environmental expertise.

Unfortunately, given the desolate state of humanity's sustainability progress, with the geosphere and biosphere approaching dangerous tipping points, we cannot afford the time to wait until society sees the results if traditional finance practitioners or business managers with no or only rudimentary sustainability and environmental expertise can generate substantial, verifiable ESG impacts. The question is, "Do we really have the time to see how this plays out, just based on the need for scientists or non-financial experts not to seem like inflexible gatekeepers?"

There is too much talk around science-based investment decision-making, unfortunately often with surprisingly few actual scientists, researchers, or genuine subject matter experts being part of these initiatives. Sustainability-themed funds, especially those dealing with planetary boundaries or scientific metrics pertaining to climate or nature, should be co-managed by a financial expert and an environmental expert, since incrementalism serves no one. It is simply not enough to have awareness of ESG topics and sustainability issues and be able to look up ESG scores or ratings on a Bloomberg terminal.

It is thereby important to look at all stakeholders within financial and corporate sectors, including consultancies, advisory firms, auditors, and assurers, as reports seem to indicate that overstating climate-related capacities is surprisingly common [20]. This raises the question of a need for a common, mandatory knowledge baseline for ESG practitioners. Professions like architects, doctors, pharmacists, civil engineers, and lawyers require a standardized proof of minimum expertise, since it reduces significant societal risks to public health or professional integrity. While mandatory, legally standardized professional accreditations are certainly not perfect, they provide a level of trust in someone's subject matter expertise and skills.

Climate change and biodiversity loss are risks too great to leave to self-proclaimed ESG "experts" with little material non-financial subject matter expertise, including core environmental science knowledge. We do not accept such risk for our buildings or health, so why do we accept it for ESG or sustainability?

Besides a mandatory knowledge baseline, the recruitment of ESG professionals, from entry-level positions to executives and boards, is another important area that needs to become more aware of greenwashing and competence greenwashing risks. One report stated, "Firms look internally for talent to run efforts or lead ESG. They will often move a top performer out of traditional investing into a leadership role within impact investing or look for candidates with communications, PR or marketing backgrounds [21]." Therefore, recruiters and internal human resources teams should avoid the following:

- Adding "ESG," "Climate," or "Sustainability" to the job titles of existing executives/directors/managers/analysts.

- Creating token sustainability, climate, or ESG positions, often promoting someone remotely related to corporate social responsibility just to respond to market-level or reputational pressures or appointing big names "Head of ESG/Sustainability" or "Chief Sustainability Officer" without solid material ESG track records or genuine sustainability expertise.

- Recruiting "ESG experts" who only completed online introductory ESG certificate courses that are not equal to subject matter expertise in areas like climate change, biodiversity, or ecosystems.

- Creating climate service, ESG, or sustainability teams that lack disciplinary diversity at the skill level, as such teams require expertise in addition to financial, management, and business skills. An equal amount of non-financial scientific expertise is needed to properly assess climate- and nature-related risks and impacts.

All knowledge is valuable, but not all expertise is material depending on the context. Therefore regulators, investors, companies, and recruiters should start looking more closely at the non-financial capacities of those managing their ESG portfolios. This paper provides some guidance and proposes draft tools and an ESG skill materiality matrix, among other suggestions, in terms of identifying and contextualizing competence greenwashing and recommends how to reduce it over time.

REFERENCES

[1] Intergovernmental Panel on Climate Change. Sixth Assessment Report, WG III: Chapter 15, Investment and Finance. Geneva, Switzerland: IPCC; 2022. https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter_15.pdf

[2] Schumacher K. Green bonds: The shape of green fixed income investing to come. SSRN Electronic Journal 2020. https://doi.org/10.2139/ssrn.3663308.

[3] Principles for Responsible Investment. Investors and the Sustainable Development Goals. London, UK: Principles for Responsible Investment; 2017. https://www.unpri.org/sustainable-development-goals/investors-and-the-sustainable-development-goals/304.article.

[4] Global Sustainable Investment Alliance. Global Sustainable Investment Review 2020. Brussels, Belgium: Global Sustainable Investment Alliance; 2021. http://www.gsi-alliance.org/wp-content/uploads/2021/08/GSIR-20201.pdf.

[5] United Nations Commission on Trade and Development. World Investment Report 2022. Geneva, Switzerland: UNCTAD; 2022. https://unctad.org/system/files/official-document/wir2022_en.pdf.

[6] Global Impact Investing Network. GIINsight: Sizing the Impact Investing Market 2022. New York, USA: GIIN; 2022. https://thegiin.org/assets/2022-Market Sizing Report-Final.pdf.

[7] Friede G., Busch T., Bassen A. ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance and Investment 2015; 5(4): 210–233. https://doi.org/10.1080/20430795.2015.1118917.

[8] Lau P., Sze A., Wan W., Wong A. The economics of the greenium: How much is the world willing to pay to save the earth? Environmental and

Resource Economics 2022; 81(2): 379–408. https://doi.org/10.1007/s10640-021-00630-5.

[9] In S.Y., Schumacher K. Carbonwashing: ESG data greenwashing in a post-Paris world. In: Seiger A., Heller T. Settling Climate Accounts: Navigating the Road to Net Zero. Cham: Springer International Publishing; 2021, pp. 39–58. https://doi.org/10.1007/978-3-030-83650-4_3.

[10] Berg F., Kölbel J.F., Rigobon R. Aggregate confusion: The divergence of ESG ratings. Review of Finance 2022. https://doi.org/10.1093/rof/rfac033.

[11] Makower J. 2021. Inside the war for ESG talent. GreenBiz 2021. https://www.greenbiz.com/article/inside-war-esg-talent.

[12] Schumacher K. 'Competence greenwashing' could be the next risk for the ESG industry. Responsible Investor 2020. https://www.responsible-investor.com/articles/competence-greenwashing-could-be-the-next-risk-for-the-esg-industry.

[13] Nauman B. 2020. Fund managers struggle to compare ESG apples with oranges. Financial Times, 11 May 2020. https://www.ft.com/content/6ff72af4-5d76-11ea-ac5e-df00963c20e6.

[14] European Banking Authority. EBA Report on Management and Supervision of ESG Risks for Credit Institutions and Investment Firms. Frankfurt, Germany: EBA; 2021. https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2021/1015656/EBA Report on ESG risks management and supervision.pdf.

[15] European Securities and Markets Authority. ESMA's technical advice to the European Commission on integrating sustainability risks and factors in MiFID II. Paris, France: ESMA; 2019. https://www.esma.europa.eu/sites/default/files/library/esma35-43-1737_final_report_on_integrating_sustainability_risks_and_factors_in_the_mifid_ii.pdf.

[16] European Central Bank. Guide on Climate-related and Environmental Risks. Frankfurt, Germany: European Central Bank; 2020. https://www.

bankingsupervision.europa.eu/ecb/pub/pdf/ssm.202011finalguideonclimate-relatedandenvironmentalrisks~58213f6564.en.pdf.

[17] International Auditing and Assurance Standards Board. Non-Authoritative Guidance on Applying ISAE 3000 (Revised) to Extended External Reporting Assurance Engagements. New York, USA: International Auditing and Assurance Standards Board; 2021. https://www.ifac.org/system/files/publications/files/IAASB-Guidance-Extended-External-Reporting.pdf.

[18] PwC. Charting the course through a changing governance landscape: PwC's 2022 Annual Corporate Directors Survey. London, UK: PwC; 2022. https://www.pwc.com/us/en/services/governance-insights-center/assets/pwc-2022-annual-corporate-directors-survey.pdf.

[19] Whelan T. U.S. corporate boards suffer from inadequate expertise in financially material ESG matters. SSRN Electronic Journal 2021. https://doi.org/10.2139/ssrn.3758584.

[20] Webb D. Consultants overestimate quality of own advice on climate, report suggests. Responsible Investor 2022. https://www.responsible-investor.com/consultants-overestimate-quality-of-own-advice-on-climate-report-suggests/.

[21] Fordham L. The ESG talent pool. Private Equity International 2021. https://www.privateequityinternational.com/the-esg-talent-pool/.

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