



ENVIRONMENTAL ACCOUNTING IN ALBANIA: EXISTING PRACTICES COMPARED TO CORPORATE PREPAREDNESS FOR SUSTAINABILITY REPORTING

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Abstract

Environmental accounting is widely acknowledged as an essential instrument for sustainable development; nevertheless, its adoption in emerging economies remains constrained. This study investigates the status of environmental accounting in Albania utilizing a dual-method approach: a content analysis of yearly disclosures from 100 big enterprises and a survey of 56 corporate entities across diverse sectors. The content analysis indicates minimal environmental disclosure, with only 15% of enterprises referencing an environmental policy and a mere 2% disclosing environmental expenditures or provisions, suggesting that corporate reporting in Albania predominantly overlooks environmental repercussions. The survey results indicate that the majority of Albanian enterprises have not implemented formal environmental accounting procedures or standards, and voluntary adoption is modest due to the lack of legal incentives and competing objectives. Respondents recognize the significance of sustainable practices and anticipate advantages, including enhanced reputation and compliance readiness, particularly as Albania advances toward European Union (EU) membership. Comparative analysis with adjacent Western Balkan nations reveals analogous trends, with Albania trailing marginally behind its regional counterparts in sustainability reporting and certification implementation, but the entire region is still in the nascent phase of development in this domain. The findings reveal

substantial deficiencies in corporate environmental accountability in Albania and emphasize the necessity for enhanced regulatory frameworks, capacity development, and stakeholder advocacy. Adhering to the EU's Corporate Sustainability Reporting Directive (CSRD) will be essential for enhancing environmental accounting standards in Albania, fostering increased transparency and aiding the nation's sustainable development objectives.

Keywords: Environmental accounting; Sustainability reporting; Environmental disclosure; Albania; Western Balkans; Corporate sustainability

INTRODUCTION

Sustainable development has emerged as a global necessity in an age where environmental degradation and its repercussions are more apparent. Sustainable development was described by the Brundtland Commission in 1987 as development that satisfies present demands without jeopardizing the capacity of future generations to fulfill their own needs. This definition underscores the necessity of harmonizing economic growth with environmental conservation and social welfare (Dangelico & Pontrandolfo, 2013). Nobel laureate economist Joseph Stiglitz has emphasized that adopting sustainable practices would significantly influence the global economy, and incorporating these practices into firm finance models is increasingly essential (Rahi, Akter, & Johansson, 2022). Accountability for environmental impacts has become a fundamental aspect of corporate responsibility, leading to the emergence of environmental accounting.

Environmental accounting, sometimes known as "green accounting" or sustainability accounting, is a discipline of accounting that seeks to integrate environmental considerations and well-being into financial reporting and decision-making (Ikram & Oulad Seghir, 2022). The origins of environmental accounting date back to the 1970s and 1980s; notably, Peter Wood in the 1980s offered an initial definition of this concept, characterizing it as an augmentation of conventional accounting that explicitly incorporates environmental resources and costs into corporate financial statements (Ikram & Oulad Seghir, 2022). Environmental accounting is the identification and quantification of the ecological costs associated with a company's operations (e.g., pollution mitigation, waste management, resource depletion) and the incorporation of this data into its financial statements or management control frameworks. By doing so, firms recognize their accountability for environmental consequences and enhance the openness of their sustainability management practices (Bartelmus & Vesper, 2000). Environmental accounting resides at the convergence of corporate financial responsibility and sustainable development principles.

Although there is widespread agreement on the significance of sustainable development, its implementation via corporate accounting and reporting has been challenging (Bartelmus & Vesper, 2000). A significant difficulty has been the absence of standardized definitions and language, resulting in ambiguity regarding reporting requirements for firms (Bartelmus & Vesper, 2000). A further issue lies in reconciling environmental science with economics, as each discipline prioritizes distinct metrics and results, hence complicating the integration of environmental data into business reporting. Research indicates that global corporate social and environmental reporting is often inconsistent, incomplete, and predominantly voluntary, rather than thorough or standardized (Milne & Adler, 1999). Despite the publication of sustainability reports by certain corporations, the breadth and caliber of material differ significantly, with most organizations offering merely vague assertions rather than measurable environmental performance metrics (Milne & Adler, 1999).

The condition of environmental accounting in developing and transition economies is particularly noteworthy, considering the urgent environmental issues and the drive for economic advancement in these nations. Sustainability reporting in the Western Balkans, which includes Albania and its adjacent nations, remains nascent. Currently, none of the Western Balkan nations require extensive environmental or sustainability reporting from corporations, and corporate disclosures in these areas are predominantly voluntary and constrained (Veledar, Gadžo, & Knežević, 2024; Stojanović-Blab, Blab, & Spasić, 2016). A study of Serbian corporations revealed that sustainability reporting was inadequate and unsatisfactory, especially among large enterprises (Stojanović-Blab et al., 2016). A limited number of prominent firms in the region, typically those with foreign ownership or engaged in export markets, have commenced the issuance of sustainability reports adhering to frameworks such as the Global Reporting Initiative (GRI). Overall participation remains minimal; in Albania, fewer than five companies have published a comprehensive sustainability report, whereas Serbia has approximately 15 to 20 such companies (Veledar et al., 2024). In all Western Balkan nations, environmental reporting is predominantly voluntary and influenced primarily by external influences, such as investor expectations or UN Global Compact activities, rather than by legal mandates. In the forthcoming years, this is anticipated to evolve as these nations progress towards European Union integration, necessitating compliance with the EU's rigorous sustainability reporting standards (Veledar et al., 2024).

Albania presents a fascinating opportunity to analyze emerging environmental accounting practices. Albania, as a transitional economy and EU aspirant, confronts the combined task of promoting economic development while aligning its corporate practices with global sustainability standards. Albania officially seeks to join the European Union, necessitating

the implementation of the EU Corporate Sustainability Reporting Directive (CSRD) and associated European sustainability criteria in the imminent future. The CSRD, enacted in 2022, substantially broadens obligatory non-financial reporting, mandating big corporations to provide environmental, social, and governance (ESG) data in accordance with comprehensive European Sustainability Reporting Standards (European Commission, 2022). As of 2025, Albania has not yet integrated these standards into national legislation; yet, its status as an EU candidate necessitates compliance with the EU *acquis*. This forthcoming legislative change necessitates an immediate evaluation of Albania's existing readiness for environmental accounting and reporting.

This paper presents a comprehensive analysis of environmental accounting in Albania utilizing a dual methodology: (1) a content analysis of corporate annual reports to assess the environmental disclosures of Albanian companies, and (2) a survey of business managers to evaluate their practices, awareness, and attitudes towards environmental accounting and sustainability reporting. The aims are to record the degree (if any) of environmental information in the public reports of Albanian enterprises, to comprehend the reasons and problems from the practitioners' perspective, and to juxtapose Albania's status with that of neighboring Western Balkan countries. The study provides insights on the positioning of Albania's business sector regarding sustainability accounting and its implications for policy, particularly concerning EU accession and the CSRD, as well as for the country's sustainable development.

RESEARCH METHODOLOGY

The research utilized a mixed-methods approach, integrating content analysis of annual corporate reports with a structured survey questionnaire. A purposive sample was used for the sampling design, comprising the 100 largest enterprises in Albania as determined by revenue reported to national tax authorities. These corporations encompassed critical industries such as construction, manufacturing, trade, and energy, as they were anticipated to exert a more significant environmental impact and possess higher resources for future disclosure. The questionnaire was predominantly disseminated through email, augmented by follow-up reminders and telephone calls to enhance response rates. Throughout the data collection process, various challenges arose: numerous email invitations went unanswered as they were categorized by company systems as spam or potential threats; many public websites provided insufficient contact information for pertinent personnel; and in certain cases, companies exhibited a lack of interest in participation. Consequently, only 56 legitimate replies were acquired, constraining the size and variety of the final survey sample.

Analysis of corporate report content

The content study concentrated on the annual reports and associated filings of prominent corporations in Albania. The target population consisted of major commercial entities, based on the assumption that larger enterprises are more inclined to adopt environmental accounting practices and are generally the most significant polluters (Larrinaga-Gonzalez & Bebbington, 2001). We picked 100 enterprises recognized as significant taxpayers by Albania's tax authorities, specifically the 100 largest economic entities by revenue, across diverse industries. This purposive sample comprised 16 enterprises in construction, 33 in manufacturing, 8 in energy and extractive industries (oil and gas), 25 in trade, and the remainder in sectors such as transportation and telecommunications. All these firms are of medium or large scale by Albanian standards and function in industries with potentially substantial environmental impacts. By concentrating on this cohort, we aimed to illustrate an optimal scenario for environmental reporting in Albania; if the largest and ostensibly most resource-endowed companies exhibit minimum disclosures, it may be deduced that smaller enterprises are even less inclined to disclose.

We gathered the latest annual financial statements and related reports for each of the 100 companies from the National Business Center (Qendra Kombëtare e Biznesit – QKB) and any publicly accessible reports on their websites, including sustainability reports and environmental policy statements. Subsequently, we conducted a manual text analysis to ascertain the existence or nonexistence of essential environmental accounting components within these disclosures.

The analysis was organized around particular indicators, including if the company:

- References an environmental policy or a dedication to environmental stewardship, including a general assertion of environmental awareness.
- Has acquired environmental certifications such as ISO 14001 (certification for environmental management systems) or equivalent, signifying formalized environmental management initiatives.
- Recognizes environmental hazards or contingencies in its reporting (including pollution incident risks, climate-related risks, etc.).
- Indicates adherence to environmental statutes and regulations, such as citing environmental permits or legal responsibilities.
- Designates accountability for environmental matters to an executive or board member (e.g., the presence of an environmental manager or committee).
- Reveals quantitative environmental metrics or financial data pertinent to the environment, such as emissions statistics, waste production, water or energy consumption, environmental

expenditures, provisions for environmental liabilities, investments in environmental conservation, or fines/penalties incurred for environmental violations.

The paperwork of each organization were meticulously examined for these items. Due to the unstructured narrative quality of much reporting, a qualitative manual review was selected instead of automated text analysis to guarantee the acquisition of contextually pertinent information, regardless of variations in terminology. Two researchers verified the coding for correctness. The results of the content analysis consist of binary (yes/no) data identifying which companies display each of the aforementioned environmental disclosure elements, together with summary statistics (frequencies and percentages) that characterize the overall extent of environmental accounting disclosure within the sample.

Examination of Commercial Practices and Perspectives

To augment the text analysis, we conducted a poll of business practitioners to explore the internal perspective on environmental accounting. A questionnaire was created addressing various elements: the company's profile, existing environmental accounting practices, awareness and understanding of sustainability frameworks, motivations and obstacles to implementing environmental accounting, perceived advantages of sustainability reporting, and expectations concerning future obligations, especially in relation to EU standards and the CSRD. The survey mostly focused on comparable categories of companies as the content analysis (middle and large enterprises across diverse industries), albeit not identical firms due to availability and willingness to participate. We pursued extensive representation across sectors to guarantee varied perspectives.

The survey tool was developed to evaluate firms' preparedness for sustainability reporting, encompassing both existing practices and foundational perceptions. Inquiries focused on corporate characteristics (dimensions, sector, ownership, global operations) and the responsibilities of respondents to contextualize their viewpoints. The survey assessed respondents' knowledge and training concerning environmental accounting frameworks (ISO 14001, GRI, CSRD/ESRS, IFRS), existing environmental management practices (certifications, strategies, performance measurement, specialized environmental cost accounting), and the implementation of established sustainability standards.

The survey instrument evaluated corporate preparedness for sustainability reporting by examining company profiles, respondent roles, familiarity with sustainability frameworks (ISO 14001, GRI, CSRD/ESRS, IFRS), and existing environmental practices including certified management systems, environmental cost tracking, sustainability reporting, and the implementation of reporting standards. Participants assessed their knowledge and training in

environmental accounting, identified existing internal practices, and evaluated the perceived significance of potential advantages such as enhanced reputation, regulatory compliance, cost efficiencies, and competitive edge, indicating their preparedness and inclination to embrace more comprehensive sustainability reporting in the future.

The survey was conducted predominantly online, supplemented by follow-up emails and phone calls to enhance response rates. We received 56 valid replies. The survey data were examined utilizing descriptive statistics (frequencies, percentages, mean Likert scores) to encapsulate the overarching trends. Due to the exploratory nature of the study and the limited sample size, the analysis concentrated on recognizing patterns and shared impressions rather than testing hypotheses. We consolidated the findings to emphasize existing processes, corporate perceptions of sustainability reporting, and the areas requiring enhancement.

RESULTS

Environmental Disclosures in Corporate Reports

The content study of reports from 100 significant Albanian companies reveals that environmental accounting disclosure is remarkably limited in Albania's corporate reporting. The percentage of companies supplying environmental information was markedly low across nearly all assessed indicators. Principal discoveries encompass:

- Sustainability or Non-Financial Reports: Merely 4 out of 100 corporations have issued a standalone sustainability or corporate social responsibility (CSR) report of any sort. In other terms, 96% of large corporations did not publish any distinct report concerning environmental or social performance. Among the limited reports available, they were generally concise and not consistently in accordance with international standards.
- Environmental Policy Presence: Merely 15% of corporations (15 out of 100) referenced the existence of an environmental policy or a general commitment to environmental management in their public disclosures. This encompasses even cursory mentions. In numerous instances, the references constituted broad assertions within a corporate profile or website (e.g., professing environmental consciousness) rather than a formalized, recorded policy. A limited number of companies has a distinctly established and precise environmental policy statement.
- Environmental Management Certification: 12% of organizations have been verified to have established a certified Environmental Management System, specifically ISO 14001 certification. These entities mostly comprised manufacturing and construction firms with considerable environmental repercussions that sought ISO 14001 to enhance performance and comply with international norms. The existence of only 12 companies with ISO 14001 certification signifies

that the overwhelming majority of Albanian enterprises have not implemented formal environmental management systems.

- **Environmental Risk Disclosure:** Merely two corporations specifically identified and acknowledged environmental hazards in their annual reports or notes to financial statements. This indicates that hardly no companies openly recognize potential environmental liabilities or risks (such as pollution events or climate-related threats) in their communications with stakeholders. The two individuals who mentioned hazards offered scant detail. The absence of risk disclosure suggests that even if corporations assess environmental hazards internally, they lack transparency in external communications, resulting in such concerns not being reflected in public reports.
- **Legal Compliance Statements:** Likewise, merely two corporations (presumably the same handful that acknowledged hazards) articulated any comment concerning adherence to environmental laws and regulations in their reports. Albanian enterprises regard legal environmental compliance as a given and perceive no necessity to report on it unless mandated. The notably minimal reporting indicates that environmental legal compliance is presumed and not addressed. This may indicate that organizations either perceive themselves as fully compliant with no anomalies to disclose, or they are inadequately monitoring compliance issues to incorporate them into reports.
- **Governance and Accountability:** Only one firm designated a single management or board committee accountable for environmental concerns, while another company noted the existence of a clear accountability system for environmental issues. In summary, hardly two organizations offered any information regarding their internal governance for environmental management. 98% lacked any indication of managerial oversight on environmental performance. This suggests that corporate governance in Albania predominantly lacks explicit environmental accountability, a deficiency that likely exacerbates the inadequate reporting of such information.
- **Financial Aspects of Environmental Accounting:** The reporting of quantitative environmental data was virtually absent. Only 2% of corporations reported environmental expenditures, provisions, or investments. Only two out of one hundred companies disclosed any numerical data pertaining to environmental impact or cost. One corporation revealed the establishment of an environmental provision for prospective cleaning expenses, representing a significant yet isolated instance of incorporating an environmental liability into financial statements. No corporation disclosed particular environmental capital expenditures, such as investments in pollution abatement equipment, or any environmental fines incurred. Ninety-eight percent of corporations disclosed no financial information regarding their environmental impact, highlighting that environmental externalities are unaccounted for in the financial reporting of Albanian companies.

The content study reveals that Albanian corporate annual reporting is predominantly "environment-blind." Most significant enterprises fail to publish even fundamental environmental information, such as policies or compliance, much less detailed measurements. Environmental accounting, as a facet of public financial reporting, is nearly nonexistent. Even legally mandated disclosures are scant; for example, in the presence of environmental liabilities, one would anticipate provisions or contingent liability notes, however we observed only a single case of a provision. This implies that either firms genuinely possess no quantified environmental responsibilities (which is improbable, considering the industries in question) or they fail to recognize them in financial assessments. These findings reflect observations in analogous contexts: a study in Serbia revealed that sustainability disclosures are notably limited and predominantly narrative when available (Stojanović-Blab et al., 2016), and more generally, voluntary social and environmental reporting is often deficient in the absence of regulatory compulsion. Our data indicates that Albania is no unique; voluntary environmental reporting by corporations is relatively uncommon.

Significantly, none of the companies in our sample issued a thorough, integrated sustainability report in accordance with GRI or comparable standards. The scant instances of sustainability reporting were presumably conducted as part of sporadic CSR initiatives, lacking both regularity and comprehensiveness. In Albania, even banks and telecoms companies—industries that often generate CSR or sustainability reports in other nations—exhibited a notable lack of transparency about environmental performance, with only a few outliers from foreign-owned enterprises. The deficiency in disclosure is mostly due to the absence of obligatory regulations in Albania; at present, Albanian legislation does not mandate non-financial reporting, in contrast to several EU nations where big corporations are required to incorporate a non-financial statement in their annual reports. Consequently, the majority of corporations opt not to disclose this information publicly.

Table 1 summarizes the content analysis findings, emphasizing the markedly low prevalence of environmental disclosure across multiple categories.

Table 1. Environmental disclosures from Albanian enterprises (N = 100)

Disclosure element	Companies (n)	Companies (%)
Issued a stand-alone sustainability/CSR report	4	4%
Mentioned an environmental policy	15	15%
ISO 14001 certified (environmental MS)	12	12%
Disclosed environmental risk information	2	2%
Mentioned environmental law compliance	2	2%
Assigned management responsibility for EHS	2	2%
Reported env. expenditures/provisions	2	2%

Note: EHS denotes Environmental, Health, and Safety

Survey Findings: Practices and Attitudes

The examination of 56 enterprises provides significant background to the aforementioned findings. It elucidates the minimal external reporting by firms and clarifies their prevailing internal processes and attitudes. The principal findings from the survey are delineated below, categorized by theme.

Awareness and Training: Generally, the surveyed organizations have a limited understanding of environmental accounting concepts. Approximately 70% of respondents indicated that they had not undergone any formal training in environmental accounting or sustainability reporting in recent years. Merely approximately 30% had participated in training or workshops on these subjects. A significant number of respondents reported acquiring knowledge of environmental accounting through informal channels or personal initiative, such as reading papers or receiving help from foreign parent businesses, rather than through structured professional development. The average self-assessed understanding of certain sustainability requirements on a 1–5 scale was minimal. For instance, awareness of GRI standards was about in the lower-middle range on average, with many individuals either unfamiliar with GRI or possessing just rudimentary knowledge. Additionally, understanding of the new EU CSRD/ESRS framework was similarly restricted, as very few managers were proficient in these forthcoming criteria. ISO 14001 was somewhat more recognized, perhaps due to the longevity of ISO standards and the involvement of numerous companies in ISO certification; yet, a minority still asserted substantial knowledge of it. The findings reveal a substantial knowledge gap: numerous Albanian company professionals remain inadequately informed on the tools and standards pertinent to sustainability accounting. This corresponds with the observation that "lack of expertise" frequently serves as an impediment to the implementation of sustainable techniques in poor nations (Larrinaga-Gonzalez & Bebbington, 2001).

Current Implementation of Environmental Practices: Despite minimal public reporting, the survey investigated whether corporations are engaging in internal environmental activities. We discovered that some organizations have implemented specific processes; nevertheless, these initiatives are not ubiquitous. Approximately 74% of respondents reported that their company implements at least one of the specified environmental management or accounting methods, whilst 26% acknowledged that their organization does not engage in any of these activities (i.e., lacks official environmental initiatives altogether). The practices most frequently reported included: Approximately 37% of surveyed organizations reported the establishment of a sustainability strategy or action plan. This indicates that around one-third are contemplating these issues strategically, although not yet disclosing any information publicly. Approximately 26% indicated that they internally assess certain environmental performance

indicators, such as energy use, carbon footprint, or trash generation. For example, certain companies monitor their electricity and water consumption for efficiency or track emissions for internal management objectives. Approximately 24–25% of respondents reported that their organization possesses ISO 14001 certification or has implemented a recognized environmental management system. This corresponds with the content analysis conclusion (12% possessed ISO 14001) – the survey proportion is elevated, likely due to the respondents being relatively more motivated towards sustainability. This indicates that a portion of corporations has invested in formal environmental management systems, although not frequently disclosing this information externally. Approximately 24% indicated that they incorporate environmental information in their yearly financial report or statements. This may encompass a brief story inside the management report or a commentary on provisions or environmental expenses. This figure exceeds the findings of the content analysis, which indicated virtually 0% engagement in depth, implying that respondents' interpretation of “information in the annual report” may consist of minimal references overlooked by our content criteria, or may reflect aspirational intentions rather than substantive disclosures. Approximately 26% reported the generation of an internal sustainability or CSR report for management purposes, regardless of public disclosure. Only 5% of enterprises, specifically 3 out of 56, indicated that they regularly produce an external or public sustainability report. This verifies that externally released sustainability reports are exceedingly uncommon, with only a few organizations, aligning with the approximately 4% identified in the content analysis. Nonetheless, the occurrence of internal reporting indicates a constructive development, since it demonstrates that data is being collected for decision-making, despite the reluctance or unpreparedness to disclose it publicly.

Conversely, a total of 26% of examined organizations engage in none of the aforementioned formal environmental measures. This highlights that numerous organizations have yet to include environmental factors into their management practices. Companies that exhibit increased activity in this domain are typically larger organizations, those with international affiliations or parent corporations, or those operating in sectors subjected to heightened scrutiny regarding environmental effect.

Accounting for Environmental expenses: We inquired about the methods organizations employ to manage environmental expenses in their accounting practices. The findings indicated that most companies do not distinctly record environmental costs in their financial records. Approximately 40% of respondents indicated that all environment-related expenses are merely documented in standard accounts (general overhead or regular expense categories) without any specific tracking, suggesting the absence of separate environmental

accounts in their general ledger. Nevertheless, several firms have begun to allocate specific expenses or investments pertaining to environmental matters:

Approximately 35% reported that they differentiate waste management expenses from energy or water utility costs to facilitate monitoring (for example, separately tracking electricity, fuel, and water expenditures to assess efficiency and usage patterns).

Approximately 36% indicated that they engaged in "green" investments, such as the installation of solar panels or cleaner technologies, and actively monitored such expenditures. However, this figure represents a modest absolute number, with just approximately one-third of enterprises undertaking significant green investments.

Only three companies (about 5% of the sample) reported establishing environmental provisions or reserves in their accounting, such as allocating monies for future environmental liabilities or site restoration commitments. This corresponds with the content analysis, which revealed a singular occurrence of an environmental provision in public reports. It suggests that environmental obligations are infrequently acknowledged formally by Albanian companies in their financial reports.

In summary, the majority of enterprises in Albania integrate environmental expenses into general overheads, resulting in management potentially lacking awareness of expenditures (or savings) related to environmental operations, with these costs not being distinctly itemized. The absence of an internal accounting emphasis on environmental costs may hinder organizations' ability to control and mitigate these expenses or to substantiate environmental investments, as the financial advantages of such initiatives are not monitored independently.

Implementation of Standards: Merely 32% of the examined enterprises reported utilizing any formal sustainability accounting or reporting standard or framework, except ISO 14001, which has been previously discussed. The remaining 68% do not adhere to any established framework, like GRI reporting rules, Integrated Reporting, SASB, or comparable standards. Among the minority who affirmed the application of standards, the most frequently cited was ISO 14001, an environmental management system standard, rather than reporting standards. A few respondents indicated that they had started to align with GRI guidelines or were cognizant of forthcoming EU sustainability regulations (ESRS under the CSRD) due to the influence of a foreign parent business or advice from an overseas investor, albeit these instances were infrequent. This conclusion indicates a minimal adoption of sustainability reporting systems in Albania thus far. Essentially, although some organizations have implemented worldwide management standards, nearly none have completely accepted international sustainability reporting frameworks for their outward disclosures.

Table 2 encapsulates the adoption of diverse environmental practices across the surveyed enterprises.

Table 2. Implementation of environmental practices among surveyed enterprises (N = 56)

Environmental practice	Companies (%) reporting practice
Have a sustainability strategy or action plan	37%
Measure environmental performance indicators	26%
ISO 14001 certified (EMS in place)	25%
Include environmental info in annual report	24%
Produce internal sustainability/CSR report	26%
Produce external sustainability report	5%
No formal environmental practices (none)	26%

Note: Percentages are approximated, and various practices may be reported by any organization (excluding "none"). Twenty-six percent indicated that they engaged in none of the specified practices.

Perceived Advantages of Environmental Accounting

We requested organizations to evaluate the significance of several potential benefits associated with the adoption of environmental accounting and sustainability reporting, using a five-point scale ranging from 1 (not important) to 5 (extremely significant). The findings indicate a measured recognition of advantages. Significantly, numerous companies that have yet to implement environmental accounting acknowledge its inherent value:

The most highly scored advantage, on average, was "fulfilling social responsibility and contributing to environmental protection," which received an average relevance score of approximately 3.3 out of 5. Many respondents concurred that this outcome is ethically and socially significant. Many organizations recognize an ethical imperative for sustainability, believing that responsible environmental stewardship is integral to their function, albeit not yet vigorously implemented. This aligns with overarching concepts of corporate social responsibility and implies that, on a values basis, there is a recognition that environmental reporting is the ethically appropriate action.

- The subsequent most esteemed advantage was "enhancing image and reputation." Corporations acknowledge that sustainability reporting can bolster public trust and brand equity (mean rating approximately 3.1/5). In qualitative feedback, several managers observed that possessing an environmentally friendly image helped distinguish them, particularly when engaging with overseas partners or consumers who prioritize such concerns. They perceive possible business and public relations benefits from being regarded as environmentally friendly.

“Compliance preparedness” - the readiness for forthcoming laws or regulations (such as EU directives) – was deemed significant, with an average rating of approximately 3.1 out of 5. A multitude of responders recognize that early alignment with anticipated laws may prove advantageous. This is particularly pertinent considering Albania's EU candidacy; enterprises recognize that EU entry will probably include new compliance requirements. They regard preemptive preparation as advantageous, as it may avert future crises or sanctions. This preparedness for forthcoming regulation was cited by some companies as a rationale for perhaps increasing their focus on sustainability reporting in the near future.

Environmental measures were somewhat acknowledged for their "cost savings and efficiency," with a mean score of approximately 3.0. Certain companies concurred that monitoring factors such as energy consumption and waste can reveal chances for cost reduction; for instance, one participant noted that after adopting energy-efficient practices, their utility expenses decreased, representing a concrete advantage. Nonetheless, not all organizations were persuaded of this advantage, maybe due to the fact that the cost reductions may not be readily apparent until such steps are implemented.

- The concept of "competitive advantage" was regarded with greater skepticism, with a mean score of approximately 2.9. Several respondents indicated that in the Albanian market, sustainability does not currently confer a substantial competitive advantage, since consumers mostly make decisions based on price and quality rather than a company's environmental reputation. In many markets, a robust sustainability profile may facilitate client acquisition or contract procurement; however, this is not yet a significant factor in Albania. Consequently, this advantage is currently perceived as more theoretical.

The surveyed companies do not disregard sustainability reporting; rather, the majority perceive some potential benefits. A cynical assertion – “sustainability reporting is merely a marketing tactic devoid of genuine operational significance” – garnered limited consensus, with an average agreement of approximately 2.6/5 and only about 21% expressing strong agreement with that perspective. This indicates that the majority of respondents are not inherently averse to the concept. They see potential benefits in sustainability accounting concerning reputation, compliance, and social responsibility; yet, other limitations, such as the absence of mandates or expertise, impede their active pursuit of it. This is an encouraging indication: it suggests that if circumstances evolve (e.g., due to new rules or enhanced knowledge and resources), numerous organizations may be amenable to adopting these techniques, rather than being fundamentally opposed to them.

Dialogue

Comparative Analysis of Regions and Global Context

Albania's circumstances, as indicated by our statistics, are generally analogous to those of its Western Balkan neighbors, albeit with certain deficiencies in specific domains. Sustainability reporting in the region is nascent, predominantly voluntary, and undertaken by a limited number of firms. In nations such as North Macedonia and Serbia, the adoption of sustainability reporting commenced somewhat earlier and has been embraced by a select number of companies; however, it remains confined to approximately a dozen or a few dozen prominent firms, typically those affiliated with multinational corporations or publicly traded on stock exchanges. For example, Serbia witnessed the initiation of sustainability reporting by several major corporations in the early 2010s, and currently, approximately 15–20 enterprises, predominantly in the energy, telecommunications, and banking sectors, publish such reports. North Macedonia recorded initial cases around 2010, such as a telecommunications firm inside a broader EU-based consortium, and currently has approximately 10 to 15 enterprises reporting, predominantly larger entities, facilitated to some extent by voluntary ESG disclosure guidelines from its stock exchange. In Albania, however, the practice commenced later (mid-2010s), with less than five enterprises generating comprehensive sustainability reports, typically as isolated or pilot initiatives by a select few entities, including an oil company, a cement manufacturer, and a major bank. This indicates that Albania lags marginally behind Serbia and North Macedonia in voluntary adoption, maybe attributable to diminished foreign investment influence or weaker capital market pressures, as Albania's capital markets are less developed, resulting in an absence of a stock exchange push for ESG reporting.

Significantly, there is yet no comprehensive legal need for sustainability reporting in any of the Western Balkan countries. Serbia is unique in that it imposes a partial obligation: its Law on Accounting necessitates a non-financial statement for specific large entities (reflecting the now-repealed EU Non-Financial Reporting Directive). However, adherence to and enforcement of this requirement have been irregular, leading many Serbian companies to regard it merely as a formal obligation. Countries such as Bosnia and Montenegro lack such requirements; any sustainability reporting has primarily been conducted by subsidiaries of foreign corporations or through donor-funded pilot projects (for instance, several companies in Kosovo produced sustainability reports in 2023 as part of a UNDP initiative). Consequently, Albania's deficiency in environmental reporting is consistent with a regional trend of limited transparency. In all Western Balkan economies, enterprises have predominantly awaited EU-induced reforms to forward this agenda.

Some Western Balkan countries surpass Albania in the implementation of ISO 14001 certification and environmental management systems. Historical data indicate that Serbia has

adopted ISO 14001 more extensively; by the early 2020s, Serbia boasted over 1,000 ISO 14001–certified organizations, the highest in the region, signifying a relatively robust culture of certification, likely attributable to its larger industrial base and export orientation. North Macedonia and Bosnia each own several hundred ISO 14001-certified firms, whereas Albania had approximately 300–400 ISO 14001 certifications by 2022, based on projections that include ISO Survey data and local sources. In absolute terms, Albania possesses fewer credentials than Serbia; but, when accounting for Albania's smaller economy, the per capita figures are somewhat equal. This pattern suggests that private-sector environmental initiatives in the region have predominantly focused on internal management enhancements, such as the adoption of ISO standards, rather than on external reporting and disclosure. Our findings corroborate this observation: certain Albanian enterprises possess ISO 14001 certification or assess internal metrics (management focus) yet fail to disseminate sustainability reports (reporting focus).

At comparison to more developed economies, Albania's environmental accounting practices are evidently at an embryonic phase. Prior to the implementation of the new CSRD, numerous significant corporations in the European Union, particularly in Western Europe, were already producing comprehensive sustainability reports in response to stakeholder pressure, existing EU directives, and state legislation. Numerous corporations in nations such as France, Germany, and the UK produce comprehensive annual sustainability or integrated reports, frequently adhering to GRI or integrated reporting frameworks. Concepts such as double materiality, which evaluates both the impact of environmental issues on the company and the company's impact on the environment, are increasingly integrated into reporting standards (European Commission, 2022). Conversely, our analysis indicates that Albanian enterprises predominantly submit negligible environmental data. This disparity underscores the effort required to bridge the divide. Albanian enterprises may have substantial difficulties if they are unprepared to comply with CSRD-aligned legislation. Conversely, late adopters may enable themselves to "leapfrog" directly to the most recent requirements by learning from the experiences and errors of firms in nations who embraced sustainability reporting earlier. The worldwide backdrop highlights the urgency and potential for Albania to enhance its corporate sustainability reporting.

POLICY AND PRACTICE IMPLICATIONS IN ALBANIA

The convergence of our findings with the regional/international trajectory indicates that Albania is poised to alter its corporate reporting framework. The findings unequivocally indicate a necessity for institutional intervention to facilitate the adoption of environmental accounting. Several significant consequences and recommendations arise:

- **Legislative Action - Transitioning from Voluntary to Mandatory:** The findings unequivocally suggest that in the absence of legislative mandates, the majority of corporations will not voluntarily adopt full environmental accounting and reporting practices. Albanian policymakers, adhering to EU accession obligations, must formulate and enforce legislation that necessitates sustainability reporting for large enterprises, in accordance with the EU's CSRD. This would obligate companies to annually disclose standardized environmental, social, and governance information publicly. Enacting such regulation would immediately tackle the "absence of legal mandate" mentioned by some corporations as a rationale for non-reporting, effectively transforming environmental reporting from a voluntary practice into a compliance necessity. The poll findings indicate that most corporations anticipate and acknowledge the necessity of robust legislation to catalyze action. Merely establishing a law is insufficient; effective enforcement measures and explicit guidance are essential to guarantee meaningful compliance. However, robust regulation might swiftly enhance the standard of environmental disclosure. Experiences from EU nations indicate that the imposition of mandatory non-financial reporting compelled previously non-compliant enterprises to begin reporting, resulting in a general enhancement of transparency, notwithstanding initial superficiality in certain reports, which established a baseline for future improvement. Albania's aspiration for EU integration may be strengthened by the early implementation of CSRD-like regulations, showcasing conformity with EU standards (Veledar et al., 2024).
- **Capacity Building and Training:** Concurrent with regulation, there must be initiatives to enhance the capacity of firms to ensure compliance. The deficiency in skill and knowledge revealed by our survey indicates a necessity for training programs, professional growth, and maybe the formation of a group of sustainability consultants or auditors in Albania. Universities and professional groups, such as those for accountants and auditors, ought to incorporate sustainable accounting into their curricula and certification programs. International donors and development agencies could facilitate workshops or pilot projects to assist corporations in adopting sustainability reporting practices. Companies require both regulatory impetus and supportive resources, including education, to actualize environmental accounting. Establishing a knowledge base can also mitigate the risk of corporations regarding sustainability reports as mere formalities; with enhanced awareness, they are more inclined to participate in substantive reporting and performance enhancement.
- **Stakeholder Engagement and Pressure:** In addition to official regulations, heightened pressure or expectations from stakeholders can compel firms to take action. The government and civic society can contribute to enhancing public knowledge on corporate environmental accountability. For instance, if NGOs and media emphasize corporations' environmental effects

(or the absence of transparency), it may generate reputational incentives for companies to enhance their practices. At now, our findings suggest that Albanian consumers and NGOs exert minimal pressure on companies; however, this may alter if more information becomes available and public awareness increases. Zamora-Polo et al. (2019) contend that educating students and the general public about sustainability is essential, since it can enhance the demand for corporate accountability. Consequently, environmental education and lobbying serve as essential complimentary strategies: an informed populace is more inclined to insist that corporations act ethically and provide truthful disclosures. Albania's capital market is limited; but, as the economy progresses, investors, especially banks providing credit, may begin to demand environmental risk information. Policymakers should contemplate incentives, such as recognition or awards for early adopters, to promote voluntary enhancements prior to any regulations.

- **Ensuring Reporting Catalyzes Action:** It is essential to recognize that although this study concentrated on reporting, the primary objective is to enhance tangible environmental performance. Scholars such as Rob Gray (2019) warn that accountability must not devolve into a superficial box-ticking exercise; it should facilitate genuine transformation. Albania must guarantee that, in executing environmental accounting, enterprises are motivated to establish objectives and enhance their metrics progressively, rather than merely reporting them for compliance purposes. Otherwise, reporting may deteriorate into "greenwashing" - superficially presenting favorable narratives while neglecting fundamental repercussions (a concern noted by certain doubters in our survey). Regulators must contemplate verification procedures, including the necessity for external assurance or audits of sustainability information, as proposed by the CSRD, to uphold credibility. As data becomes accessible, stakeholders—including the public, NGOs, and media—can evaluate organizations, identifying leaders and laggards, thereby establishing reputational incentives for ongoing enhancement. In conclusion, reporting should be regarded not as an objective in itself, but as a mechanism to enhance environmental management within organizations.

CONSTRAINTS AND PROSPECTIVE INVESTIGATIONS

Prior to conclusion, it is important to recognize the limitations of this research. The content analysis, however thorough for the 100 largest companies, excluded smaller enterprises that constitute the majority of Albania's economy; therefore, the overall national performance may be significantly lower than shown. The sample of 56 organizations, while varied, is quite small and non-random; hence, the results should be interpreted as exploratory rather than conclusively representative. A self-selection bias presumably exists, as only organizations with

some interest in the topic participated in the survey, suggesting that the actual level of practice among all companies may be considerably lower. Future research may increase the sample size and potentially use qualitative interviews to explore the perspectives of company executives on environmental accounting more thoroughly. Comprehensive case studies of organizations that have initiated sustainability reporting, however limited in number, would be beneficial for discerning their motivations and the problems encountered, offering insights for others.

As Albania and its neighboring countries enact new legislation aligned with EU norms, research should assess compliance and consequences. Essential inquiries encompass: Are corporations genuinely incorporating sustainability into fundamental management practices, or are they merely engaging in minimal transparency to comply with legal requirements? Does the caliber of reporting enhance with time through experience and stakeholder feedback? Are environmental performance indices, such as emissions, waste, and resource efficiency, enhancing due to heightened accounting and transparency? Comparative analyses in the Western Balkans would be beneficial to ascertain if any nation's strategy produces superior results – for instance, one could investigate whether Serbia's partial mandate has resulted in more substantial reporting compared to Albania's entirely voluntary system, or how international investors are impacting companies in each nation differently (Veledar et al., 2024). Furthermore, examining the influence of education and human capital—given that our research and others have emphasized the importance of cultivating an educated workforce and populace—would yield valuable insights into the long-term capacity development for sustainability accounting in the region. As the regulatory landscape changes, there will be significant opportunity for longitudinal studies to monitor progress and identify best practices or ongoing challenges in the adoption of environmental accounting.

CONCLUSIONS

This study offers an in-depth examination of environmental accounting in Albania, indicating that it is presently in a nascent phase. Albanian enterprises have undertaken minimal efforts in revealing environmental information, and environmental costs and impacts are predominantly excluded from financial reporting. By conducting a dual analysis of company public disclosures and survey responses, we observe a continuous trend: environmental accountability remains unintegrated into corporate practices, chiefly due to insufficient external motivators like regulation or stakeholder demand. The majority of enterprises in Albania are not legally, economically, or socially obligated to consider their environmental impact, leading them to prioritize conventional financial criteria.

This condition is set to change. Albania's advancement towards EU accession and the forthcoming mandates of the Corporate Sustainability Reporting Directive (CSRD) indicate that inaction will soon become untenable. Companies appear to acknowledge this: numerous poll respondents recognized that obligatory sustainability reporting is imminent and that they must adjust accordingly. The findings indicate that Albanian enterprises are not inherently resistant to environmental accounting; in fact, many recognize its significance. However, they necessitate encouragement and assistance to bridge knowledge deficiencies and mitigate short-term constraints.

Albania must include environmental accountability into its economic actions to advance toward sustainable development in practice. Implementing the EU's CSRD standards in Albania will pose significant challenges; however, it also presents an opportunity to modernize business practices, enhance transparency, and guarantee that economic development does not compromise environmental integrity and future welfare.

The implementation of environmental accounting and reporting will have numerous beneficial repercussions for Albania. It will enhance the quality and accessibility of data regarding environmental performance, thereby informing both national policy and corporate decision-making. It will assist organizations in recognizing inefficiencies and dangers (such as excessive energy use or material waste) and may lead to cost reductions over time through enhanced production methods and resource efficiency. This would bolster Albania's standing as a nation committed to sustainable development, perhaps attracting socially responsible investments and international collaborations. Moreover, as Albania conforms to EU standards, its enterprises will be more adept at integrating into European markets and supply chains that increasingly demand evidence of ESG (Environmental, Social, Governance) performance. In conclusion, we assert that environmental accounting transcends mere reporting; it serves as a mechanism for facilitating sustainable company development. Albania is at a pivotal moment where it may advance by incorporating these ideas into its EU integration efforts. The endeavor necessitates collaboration among government, industry, and academia, alongside a cultural transformation within the corporate sector to adopt a more expansive concept of accountability. This study's evidence establishes a baseline and serves as a call to action. By recognizing existing deficiencies and comprehending the outlined issues, Albanian politicians and corporate leaders can undertake educated actions to cultivate an atmosphere where every significant corporation quantifies, reports, and eventually endeavors to mitigate its environmental impact. This would assure adherence to new legislation while also enhancing the nation's long-term economic resilience and the welfare of its society and natural environment, which embodies the essence of sustainable development.

LIMITATIONS

This study possesses multiple limitations that must be considered when evaluating the findings. The survey sample size was limited, and participation was optional, potentially introducing self-selection bias; companies with a greater interest in environmental issues were likely more eager to participate. The sample concentrated on large corporations, omitting small businesses that constitute the majority of Albania's economy. Consequently, the national standard of environmental accounting standards may be inferior to the findings of this study. Third, significant challenges arose during the survey data collection process, including non-responses, email messages classified as spam or viruses, and insufficient accessible contact information on company websites, which constrained the quantity of usable responses. These limitations suggest that the study's results should be regarded as exploratory and suggestive rather than statistically representative of all Albanian enterprises.

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