WHY IS SUSTAINABILITY ACCOUNTING IMPLEMENTATION CRITICAL FOR HIGHER EDUCATION INSTITUTIONS? THE THEORETICAL ARGUMENTS

Putu Sukma Kurniawan

Faculty of Economics, Ganesha University of Education, Indonesia (putusukma@undiksha.ac.id)

I Made Pradana Adiputra

Faculty of Economics, Ganesha University of Education, Indonesia (adiputra@undiksha.ac.id)

I Gede Putu Banu Astawa

Faculty of Economics, Ganesha University of Education, Indonesia (banu.astawa@undiksha.ac.id)

Ni Luh Putu Ayu Lastri Pramiswari

Faculty of Economics, Ganesha University of Education, Indonesia (ayulastri.pramiswari@undiksha.ac.id)

ABSTRACT

The present study aims to provide theoretical arguments to demonstrate why the implementation of sustainability accounting is crucial in the context of higher education institutions. The absence of substantial implementation of sustainability accounting in higher education institutions in Indonesia is a matter that requires resolution. This study provides a novel perspective in the form of theoretical arguments that demonstrate the significant importance of the implementation of sustainability accounting for higher education institutions, particularly in Indonesia. The present study employs a theoretical argumentation approach, drawing upon the insights of writers and the findings of preceding research. Theoretical arguments have been developed to provide a new perspective on the implementation of sustainability accounting in higher education institutions in Indonesia. This study concludes that the implementation of sustainability accounting has crucial benefits for the development of higher education institutions in Indonesia. The implications of this study can be continued by supporting the implementation of sustainability accounting by developing implementation policies and guidelines.

Keywords: higher education institutions, sustainability accounting implementation, theoretical arguments

INTRODUCTION

The implementation of sustainability accounting in different types of organisations is a strategic move to integrate economic, environmental, and social aspects into reporting and decision-making systems (Ayuso et al., 2022). In business enterprises, sustainability accounting is utilised to identify and measure operational impacts on the environment, including carbon emissions, energy use, and waste, and to assess contributions to social welfare. In the public sector, such as local governments or state agencies, the application of sustainability accounting serves to ensure transparency in the use of natural resources and state budgets, while supporting the achievement of sustainable development goals (SDGs) (de Silva et al., 2020). In the context of higher education institutions, sustainability accounting assumes a pivotal role in evaluating the environmental performance of campuses, optimising resource management, and fostering institutional accountability towards both internal and external stakeholders (Shan et al., 2022). This implementation has been found to assist organisations, including higher education institutions, in shifting their focus beyond the pursuit of immediate financial profitability to a consideration of the long-term implications for society and the environment. By integrating economic, social, and environmental dimensions into reporting and decision-making systems, higher education institutions can assess performance from the standpoint of financial profitability whilst also considering the long-term impact of their activities on society at large and environmental sustainability. This is consistent with the paradigm shift witnessed in contemporary higher education, which is not only oriented towards academic achievement, but also plays an active role in creating sustainable value and strengthening the university's position as an agent of social change. The implementation of sustainability accounting enables universities to become more responsive to global issues such as climate change, social inequality, and resource crises, and to make them an integral part of long-term institutional strategies (Galleli et al., 2022).

Currently, the implementation of sustainability accounting has begun to be applied in various higher education institutions in response to the increasing demands for transparency, accountability, and social responsibility from stakeholders, including students, government, and the wider community. Higher education not only functions as an academic institution, but also as a social entity that has significant environmental and social impacts, such as energy use, waste management, and community engagement (Winkler et al., 2022). Therefore, the application of sustainability accounting in the campus environment aims to measure and report the institution's performance in terms of sustainability, including carbon emissions, energy efficiency, water usage, as well as social initiatives such as inclusivity and community empowerment programmes. The resulting sustainability report can also be used as a strategic tool for longterm planning, performance evaluation, as well as effective communication to stakeholders (An et al., 2017). In addition, the implementation of sustainability accounting in higher education institutions also encourages the integration of sustainability values in the curriculum, research, and overall organisational culture (An et al., 2017). The implementation of sustainability accounting in higher education institutions, such as sustainability reporting practices and sustainability performance measurement, has provided evidence that the management of higher education institutions is highly committed to supporting sustainability issues. The practice of sustainability reporting enables academic institutions to methodically convey to the public their environmental, social, and governance (ESG) strategies, programmes, and accomplishments (Galleli et al., 2022). This document generally comprises quantitative and qualitative data pertaining to emissions reduction, energy efficiency, water utilisation, social inclusion programmes, and

ethics and good governance policies. Moreover, sustainability performance measurement provides an objective basis for management to evaluate the effectiveness of implemented policies and to design strategies for continuous improvement. The utilisation of sustainability indicators, such as the campus carbon footprint index, community participation in social programmes, and the level of satisfaction of the academic community, serves as crucial measurement tools in ensuring that the institution persists in its trajectory towards greater responsibility and sustainability (Mawonde & Togo, 2019). This commitment is of significance not only in terms of responding to regulatory demands and public expectations, but also in terms of its role as a strategic advantage that serves to strengthen the institution's reputation at both the national and global levels.

In the Indonesian context, there has been a paucity of higher education institutions that have attempted to implement sustainability accounting in their activities. In the Indonesian context, the implementation of sustainability accounting in higher education institutions is still relatively limited and has not become a common practice. Despite the integration of the concept of sustainability within numerous national and international policies, including the Sustainable Development Goals (SDGs), the majority of Indonesian universities continue to prioritise conventional financial reporting that exclusively focuses on economic aspects. This inadequate level of implementation can be attributed to several factors, including a paucity of understanding and awareness of the importance of sustainability accounting, a shortage of human resources with the necessary competence in this field, and the absence of regulations or technical guidelines governing sustainability reporting specifically for the higher education sector. Furthermore, the majority of higher education institutions in Indonesia have not incorporated sustainability as a fundamental component of their institutional strategy, consequently resulting in a lack of prioritisation for initiatives aimed at evaluating and documenting environmental and social performance. However, with mounting demands from society, government, and accreditation agencies for transparency and accountability, the implementation of sustainability accounting can be a strategic step to strengthen the position of higher education institutions as agents of change (Adams et al., 2018; Lozano et al., 2013; Shan et al., 2022).

It is imperative that various stakeholders, encompassing the government, professional associations, and the academic realm, are encouraged to integrate sustainability principles into the reporting system and governance framework of higher education institutions in Indonesia. In the context of higher education institutions in Indonesia, there is an evident necessity for both internal and external pressures that encourage a faster implementation process of sustainability accounting. The concept of internal pressure refers to the drive that originates from within the institution itself. This may encompass factors such as the dedication of university leaders, the cognisance within the academic community of the significance of sustainability, and the incorporation of sustainability concerns into various aspects of the institution, including its curriculum, research endeavours, and community service initiatives. Moreover, encouragement from internal units such as the finance bureau, facilities management and the environmental studies centre are also important factors that encourage universities to start developing a more systematic system of reporting and measuring sustainability performance. The integration of sustainability values within the organisational culture of the campus is pivotal in facilitating the adoption of sustainability accounting as a component of sustainable managerial practices, transcending the confines of mere administrative obligations (Bayhantopcu & Aymerich Ojea, 2024; Nicolò et al., 2023). Concurrently, external pressures emanate from various external entities, including government regulations mandating sustainability reporting for public

institutions, encouragement from national and international accreditation agencies, community and stakeholder expectations, and global trends that demand social and environmental responsibility from all sectors, including higher education. The combination of these internal and external pressures not only accelerates the adoption of sustainability accounting, but also ensures that its implementation is consistent, integrated and orientated towards continuous improvement. Consequently, it is imperative for Indonesian universities to establish synergies between internal and external forces in order to cultivate an institutional environment that is proactive towards sustainability issues.

The present study aims to provide theoretical arguments to demonstrate why the implementation of sustainability accounting is crucial in the context of higher education institutions. In the context of legitimacy theory, higher education institutions are obligated to demonstrate support from society and stakeholders by evidencing that their operational activities are aligned with the principles of sustainability and social responsibility (Saha et al., 2021). The stakeholder theory approach is instrumental in facilitating the communication of social and environmental performance to interested groups, including students, faculty members, government entities, local communities, and industry partners. Moreover, institutional theory posits that normative, mimetic and coercive pressures can incentivize educational institutions to adopt sustainability practices, thereby maintaining their legitimacy and competitiveness. Sustainability accounting is also associated with the triple bottom line theory (Hussain et al., 2018). This theory emphasizes the importance of achieving performance not only from an economic perspective, but also from the social and environmental dimensions. Within the domain of higher education, these three dimensions can be assessed through the effective utilization of resources, the institution's contribution to social development, and its financial sustainability (Sepasi et al., 2019). It is therefore evident from this study that in the absence of a structured and comprehensive reporting system, such as sustainability accounting, higher education institutions will encounter significant challenges in demonstrating their commitment to sustainability in a transparent and accountable manner. The theoretical arguments generated from this study can be used as a basis to support the implementation of sustainability accounting in higher education institutions in the future. This constitutes a form of contribution from the academic group with the objective of formalising the implementation of sustainability accounting in higher education institutions and achieving a broad impact.

The contribution of the present study is to provide a set of arguments to relevant stakeholders; therefore, the implementation of sustainability accounting can be formalised in the future in the context of higher education institutions. The present study aims to clarify that sustainability is not merely a moral discourse, but a strategic necessity that should be integrated into the reporting and governance systems of institutions. This objective is pursued through the elaboration of theoretical arguments and practical relevance. A more profound comprehension of the merits of sustainability accounting, including enhanced accountability, operational efficiency, and institutional reputation, is anticipated to motivate stakeholders to formulate policies, guidelines, or even regulations that would incorporate this practice as a mandatory component of the reporting system for higher education institutions. Moreover, the present study can function as a foundational reference point to encourage the integration of sustainability principles into the curriculum and academic activities. This would ensure that the principles of sustainability accounting are not only applied in administrative contexts, but also instilled as values in the educational process (Ceulemans et al., 2015). Consequently, this study makes a conceptual contribution and also encourages

institutional transformation towards a higher education system that is more socially and environmentally responsible.

LITERATURE REVIEW

In recent decades, the issue of sustainability has become a global concern that is not only limited to the business and industrial sectors, but also extends to the education sector, including higher education institutions (Ahonen et al., 2024; Cho & Costa, 2024; Vien & Galik, 2024). The challenges posed by climate change, natural resource crises, and increasing social inequality necessitate that all types of organisations, including universities, assume an active role in supporting sustainable development. One approach that can be adopted when evaluating an organisation's contribution to sustainability is the implementation of sustainability accounting in higher education institutions. Sustainability accounting is defined as the collection, measurement, analysis, and reporting of information that reflects the environmental, social, and economic performance of an entity (Cho & Costa, 2024; Shen et al., 2020). This concept is particularly relevant in the context of higher education institutions. In the context of environmental concerns, sustainability accounting involves the meticulous documentation of data pertaining to various environmental factors, including but not limited to: energy consumption, carbon emissions, waste management practices, and the utilisation of water and other natural resources. From a sociological perspective, higher education institutions are held accountable for their societal contributions through community service initiatives, equal access to education, and the welfare and involvement of the academic community (Hernandez-Diaz et al., 2024). From an economic perspective, the information collected encompasses budget efficiency, financial transparency, and local economic impacts generated through academic and non-academic activities. The implementation of sustainability accounting has been demonstrated to enhance institutional accountability and transparency towards stakeholders, thereby facilitating strategic decision-making processes with a focus on long-term sustainability (Bayhantopcu & Aymerich Ojea, 2024).

Currently, the implementation of sustainability accounting has begun to be applied in various higher education institutions as a form of responsibility towards internal and external stakeholders, including students, academic staff, government, and society (Lozano et al., 2013; Shan et al., 2022). Universities have a strategic role as agents of social, economic, and environmental change, both through their operational activities and through their influence in education and research. Therefore, sustainability accounting in the campus environment includes not only reporting on carbon emissions, energy efficiency, and waste management, but also social engagement, inclusiveness, and alignment with sustainability values in academic and managerial activities (Adams et al., 2018; Mawonde & Togo, 2019). Social engagement includes the institution's involvement with the surrounding community through community service programmes, research collaborations that have a direct impact on local development, and active participation in social and environmental issues. Inclusiveness is reflected in efforts to create a campus environment that is fair, equal, and free from discrimination, both in student admissions, staff recruitment, and in the formulation of internal policies. Furthermore, the congruence with sustainability values is apparent in the integration of these principles into the learning curriculum, research activities, and daily managerial practices (An et al., 2017). This commitment is reflected in the role of higher education institutions as both centres of knowledge development and agents of social change, with the objective of

encouraging the creation of a more sustainable and equitable society. It may thus be concluded that sustainability accounting on campus is holistic and transformative in nature, with the capacity to impact all aspects of academic life (Amaral et al., 2015). This, in turn, engenders long-term positive impacts for both current and future generations.

The implementation of sustainability accounting in higher education institutions can also be reflected in the concept of university sustainability performance (Hernandez-Diaz et al., 2024). The concept of university sustainability performance is defined as an indicator of the extent to which universities not only carry out academic functions, but also contribute significantly to the achievement of sustainable development goals (SDGs). In this context, sustainability accounting plays an important role as a tool to identify, measure and communicate the impact of university activities on society and the environment (Hernandez-Diaz et al., 2024). For instance, the concept of sustainability performance encompasses a range of factors, including energy and water use efficiency, waste management, social engagement with local communities, the establishment of inclusive educational access, and the formulation of internal policies that promote diversity and equality. By systematically incorporating sustainability practices into institutional reports, universities can enhance their social legitimacy and demonstrate accountability to stakeholders. Moreover, the integration of sustainability accounting with university sustainability performance creates possibilities for higher education institutions to undertake more comprehensive and methodical selfevaluation. Through this process, the university can assess the extent to which the policies, programs, and activities implemented are aligned with sustainability principles (Lang, 2015). This evaluation includes measuring the impact of each activity on the environment, social aspects, and the economy, as well as identifying areas that require improvement or innovation. Thus, the results of sustainability accounting not only become passive reports but also serve as an important foundation in the strategic decision-making process and the development of governance that is adaptive and responsive to sustainability challenges. Sustainability performance becomes the main indicator in assessing the effectiveness of institutional efforts, while also serving as a benchmark for formulating long-term strategies oriented towards sustainability (Lang, 2015). Therefore, the concept of sustainability performance cannot be viewed merely as an additional element, but rather as an integral part of the comprehensive implementation of sustainability accounting. This integration allows universities not only to transparently account for sustainability to stakeholders but also to strengthen the institution's position as a driving force for change towards sustainable development.

The practice of sustainability reporting has now also begun to be implemented in higher education institutions (An et al., 2017; Shan et al., 2022). The implementation of this sustainability reporting system provides benefits not only in terms of increasing the accountability and transparency of the institution but also as a strategic tool for decision-making, long-term planning, and enhancing the institution's image in the eyes of the public (Shan et al., 2022). Furthermore, the integration of sustainability accounting in higher education institutions can encourage the development of curricula relevant to global issues and instill sustainability awareness in the younger generation. Therefore, it is important to understand the theoretical foundations and practical benefits of implementing sustainability accounting in the context of higher education institutions to support the transformation towards more responsible and sustainable institutions (An et al., 2017). Understanding the theoretical foundations, such as legitimacy theory, stakeholder theory, institutional theory, and the triple bottom line concept, provides a strong conceptual framework in

explaining why and how higher education institutions need to integrate sustainability aspects into their reporting and governance (Huang et al., 2014; Juusola & Srouji, 2023). On the other hand, the practical benefits of implementing sustainability accounting include increased accountability to the public, strengthening institutional reputation, optimizing resource management, and enhancing the institution's competitiveness on both national and global scales. By adopting systematic sustainability reporting practices, higher education institutions can also be more responsive to increasingly complex social and environmental demands, and demonstrate their commitment to achieving the Sustainable Development Goals (SDGs). Thus, the integration of sustainability accounting not only supports more comprehensive reporting but also serves as an important foundation in realizing adaptive, relevant, and genuinely contributing higher education institutions towards sustainable development (Amaral et al., 2015; Galleli et al., 2022).

METHOD, DATA, AND ANALYSIS

This study uses a conceptual approach by constructing theoretical arguments based on the author's knowledge and relevant previous research findings. This approach was chosen because the main objective of this study is not to empirically test a hypothesis, but rather to build a conceptual framework that can rationally and systematically explain why the implementation of sustainability accounting is important for higher education institutions. In the conceptual approach, the authors integrate various developed theories, such as legitimacy theory, stakeholder theory, institutional theory, and the triple bottom line concept, to strengthen the argument regarding the strategic role of sustainability accounting in supporting transparency, accountability, and the operational and social sustainability of institutions. The thinking produced in this study is normative and exploratory in nature, aiming to provide insights that can serve as a foundation for policy development, institutional strategy formulation, and the strengthening of advanced studies in the field of accounting and sustainability. This conceptual approach also allows for the exploration of the interconnections between theory and practice, resulting in academic contributions that are both reflective and prospective in addressing sustainability challenges in the higher education sector.

The stages in this study are as follows we collected previous research findings that discuss sustainability accounting in higher education institutions. Previous research results include the implementation of sustainability reporting at universities, management commitment to implementing sustainability principles at universities, sustainability performance at universities, and other relevant research findings. Research results published between 2020-2025 are prioritized, accessible online, and the content of the scientific articles can be downloaded in full. This study used the results of previous research found in open access databases. This study also used several computer-based applications in the search for relevant previous research results. We operated several computer-based applications in the search for previous literature, such as Open Knowledge Maps (https://openknowledgemaps.org/), ResearchRabbit (https://www.researchrabbit.ai/), and Lens (https://www.lens.org/). The use of these applications makes it easier for us to identify previous research results that are relevant to the objectives of this study. We examined the content of previous research findings and then identified trends or patterns that focus on the implementation of sustainability accounting in higher education institutions. This also includes the theories used in previous research results. We developed a framework of thought and theoretical argumentation focusing on the use of legitimacy theory, stakeholder theory, institutional theory, and the triple bottom line

concept in discussing the importance of implementing sustainability accounting in higher education institutions. The legitimacy theory is used to explain how higher education institutions strive to maintain their existence through the alignment between institutional values and societal expectations. By implementing sustainability accounting, institutions demonstrate their commitment to social and environmental responsibility, which can ultimately enhance public legitimacy. Meanwhile, stakeholder theory emphasizes the importance of institutions in considering the interests of all stakeholders, such as students, lecturers, employees, the government, and the wider community. The implementation of sustainability accounting serves to provide relevant and transparent information to stakeholders, thereby strengthening relationships and enhancing trust. Institutional theory highlights how normative, coercive, and mimetic pressures from the external environment drive higher education institutions to adopt sustainability practices. In this context, sustainability accounting becomes a response to government regulatory demands, societal expectations, and best practices from other institutions that have already implemented it. Furthermore, the concept of the triple bottom line expands the orientation of institutions from merely achieving financial performance to simultaneously achieving social and environmental performance. Through this approach, higher education institutions not only evaluate their economic impact but also their contribution to social welfare and environmental preservation. In preparing the analysis and discussion, we also provide examples of the implementation of sustainability accounting in the context of higher education institutions in Indonesia. This can be an initial step to provide empirical evidence that this practice has been implemented and represents a significant opportunity in the future.

RESULT AND DISCUSSION

This section explains the importance of implementing sustainability accounting in higher education institutions from the perspective of several theories.

Perspective from Legitimacy Theory

From the perspective of legitimacy theory, higher education institutions as public entities have a fundamental need to gain recognition, trust, and support from society and various stakeholders, including the government, students, parents, industry partners, and the local community (Bebbington et al., 2008). The legitimacy of higher education institutions as entities that receive public support and trust heavily depends on their ability to transparently demonstrate that every activity reflects social values, ethical norms, and a commitment to relevant environmental issues in society. Amid the increasing public awareness of sustainability and social responsibility, universities are demanded not only to be centers of knowledge but also moral exemplars and agents of change (Sepasi et al., 2019). In this context, sustainability accounting serves as a strategic instrument that can bridge the external expectations of society, the government, and other stakeholders with the internal conditions and practices of the institution. Through the collection and reporting of comprehensive data on environmental, social, and economic performance, sustainability accounting provides a thorough overview of the extent to which universities fulfill their roles responsibly and sustainably. In addition to enhancing transparency and accountability, this approach also helps build public trust, strengthen the institution's reputation, and ensure that the direction of campus development remains relevant to societal needs and global demands (Barth et al., 2007; Wright, 2002). Thus, sustainability accounting not only serves as a reporting tool but also as an important foundation in

strengthening the legitimacy of higher education institutions in an era that increasingly demands sustainability and integrity.

Through sustainability reporting, universities can transparently communicate their non-financial performance, including efforts to reduce environmental footprints, strengthen social inclusivity, and contribute to community welfare (An et al., 2017; Shan et al., 2022). This serves as a form of public accountability and simultaneously as a mechanism for building institutional legitimacy. When higher education institutions can prove that all their operations and policies are based on sustainability principles, they not only strengthen their moral and social position in the eyes of the public but also open broader access to various strategic opportunities (Sepasi et al., 2019). The implementation of good sustainability accounting reflects the institution's commitment to environmental responsibility, social justice, and transparent economic governance, which in turn can enhance trust and support from the community, government, donors, and industry partners. Clarity in sustainability reporting also adds value in forging strategic partnerships, whether in the form of research collaborations, CSR programs, or funding for sustainable projects. Moreover, stakeholders such as students, alumni, and local communities tend to be more actively involved when they see that the institution is not only focused on academic achievements but also cares about social and environmental issues (Ferrero-Ferrero et al., 2018). Thus, sustainability accounting not only serves as a performance reporting instrument but also as a strategic means to maintain and strengthen institutional legitimacy. Amid the continuously evolving social dynamics, where the demands for transparency, accountability, and sustainability are increasingly high, higher education institutions that comprehensively adopt sustainability accounting will be more adaptive, relevant, and competitive in the long run (Ceulemans et al., 2015).

The implementation of sustainability accounting at universities in Indonesia is very important from the perspective of legitimacy theory because universities, as public institutions, play a strategic role in shaping social and environmental awareness in society. The legitimacy theory states that organizations will strive to obtain, maintain, and restore legitimacy from society by aligning their operations with prevailing social norms, values, and expectations (Di Tullio et al., 2020; Dowling & Pfeffer, 1975; Suchman, 1995). In this context, universities are required not only to produce quality graduates but also to show concern for global issues such as climate change, social justice, and environmental preservation. Through sustainability accounting, universities can transparently report the social and environmental impacts of their activities as well as the improvement efforts undertaken. This helps strengthen public trust, enhance the institution's reputation, and maintain harmonious relationships with stakeholders, including the government, students, the community, and other social institutions. For example, Gadjah Mada University (UGM) has demonstrated its commitment to sustainability by establishing the UGM SDGs Center and regularly publishing sustainability reports (or SDGs Reports) that cover various aspects such as waste management, energy efficiency, and social engagement. Universities in Indonesia are also active in international initiatives such as UI GreenMetric, which assesses universities based on environmental and social sustainability indicators. Similarly, the University of Indonesia (UI) consistently ranks high in GreenMetric and reports its activities related to emission reduction, water conservation, and environmentally friendly mobility on campus. These measures not only reflect adherence to sustainability values but also serve as a strategy to maintain social legitimacy as a progressive and responsible educational institution. Without initiatives like this, universities in Indonesia risk losing public trust and being considered irrelevant to

current global challenges (Kuruppu et al., 2019). Therefore, sustainability accounting is not just a reporting tool, but also a strategic mechanism to maintain the existence and credibility of higher education institutions in a society that is increasingly aware of sustainability issues (Tilling, 2004).

Perspective from Stakeholder Theory

In the framework of stakeholder theory, universities are viewed as entities operating within a complex and interconnected network of interests, where their success is greatly influenced by their ability to respond to the needs, expectations, and demands of various stakeholder groups (Hörisch et al., 2020; Roberts, 1992). These groups include students, faculty and academic staff, the government, funding agencies, the surrounding community, industry partners, and non-governmental organizations. In this context, sustainability accounting plays a very important strategic role as a tool to identify relevant issues for various stakeholders, such as students, lecturers, administrative staff, the government, local communities, and other external partners. By mapping the needs, expectations, and concerns of these stakeholders, higher education institutions can develop more responsive and inclusive strategies and policies. Sustainability accounting also enables institutions to systematically record and report how they manage natural, human, and financial resources efficiently and responsibly (Ferrero-Ferrero et al., 2018). This includes efforts to minimize negative environmental impacts—such as reducing greenhouse gas emissions, energy efficiency, waste management, and water conservation—while also promoting the creation of social value through educational activities, research, and community service. Transparency in reporting not only builds public trust but also strengthens internal and external accountability (Ferrero-Ferrero et al., 2018). Thus, sustainability accounting becomes the foundation for creating institutions that are adaptive, have integrity, and can generate a positive and sustainable impact on the entire ecosystem where the institution operates.

The demand for transparency and accountability is now stronger than ever, not only in terms of finances but also in social and environmental responsibility (Belal & Roberts, 2010). Through the preparation of structured and measurable sustainability reports, universities can demonstrate their commitment to sustainability, build trust, and strengthen relationships with various stakeholders who directly or indirectly influence the institution's continuity. More than just a reporting tool, sustainability accounting plays a crucial role in helping higher education institutions formulate policies that are more inclusive and oriented towards the common interests of all stakeholders (Andon et al., 2015). By adopting this approach, institutions not only consider internal efficiency and academic achievements, but also consider the social, environmental, and economic impacts of every decision made. This approach encourages more ethical, transparent, and strategic decision-making in the long term because it is based on data and analysis that consider various perspectives and interests. In this case, stakeholder theory provides a strong conceptual foundation for the importance of integrating sustainability accounting into the governance of higher education institutions. This theory emphasizes that the success and legitimacy of an organization are not only measured by profits or internal achievements but also by the extent to which the organization can meet the expectations and needs of stakeholders, both directly and indirectly involved (Kuruppu et al., 2019). By implementing sustainability accounting as part of governance, institutions not only strengthen public trust and support but also ensure that the direction of institutional development is always in line with the principles of justice, responsibility, and long-term sustainability.

From the perspective of stakeholder theory, the implementation of sustainability accounting at universities in Indonesia becomes very important because universities cannot operate independently without considering the interests of various groups involved or affected by the institution's activities. The stakeholder theory states that organizations have a moral and strategic responsibility to meet the expectations and needs of all parties with an interest in the organization's operations, such as students, lecturers, staff, the surrounding community, the government, donors, and industry partners. In this context, sustainability accounting becomes an important tool for identifying, measuring, and reporting the social, economic, and environmental impacts of university activities to these stakeholders (Al-Hazaima et al., 2024). Through transparent sustainability reporting, the university demonstrates accountability and its commitment to collective well-being, not just internal interests. This can enhance trust, build long-term relationships, and strengthen support from stakeholders, which in turn contributes to the sustainability and development of the university (Amaral et al., 2015; Lehmann et al., 2009).

For example, Diponegoro University (Undip) has shown attention to stakeholder interests by developing a green campus that involves the participation of students and the surrounding community in environmental activities such as integrated waste management and greening. Undip also publishes reports that show the impact of their social and environmental programs, which are directly relevant to the interests of students, residents, and regional government agencies. Through these measures, Undip not only meets the expectations of its stakeholders but also strengthens its position as a responsible and sustainable institution. Therefore, the implementation of sustainability accounting based on stakeholder theory is not only relevant but also crucial in building social legitimacy, enhancing the institution's reputation, and ensuring the university's long-term sustainability amid increasing demands for social and environmental responsibility.

Another example of implementing sustainability accounting based on stakeholder theory can be found at the Sepuluh Nopember Institute of Technology (ITS). ITS actively implements sustainability principles in its campus operations by involving various internal and external stakeholders. For example, ITS develops an environmentally friendly transportation system on campus, such as providing campus bicycles and electric vehicles, which not only supports carbon emission reduction but also responds to the needs of students and faculty for efficient and eco-friendly mobility. In addition, ITS involves students in various applied research projects focused on sustainability solutions, such as renewable energy management and waste processing, the results of which directly benefit the community and industry. ITS also periodically participates in the UI GreenMetric assessment and publishes reports on sustainable activities to the public, including energy-saving projects and community empowerment programs around the campus. By conducting reporting and active engagement, ITS demonstrates that they listen to and respond to the interests of stakeholders such as the government, industry partners, donor agencies, and the local community. This reflects how stakeholder theory not only serves as an ethical framework but also as a practical foundation in building mutually beneficial relationships that support the institution's reputation and sustainability (Ayuso et al., 2022; Ferrero-Ferrero et al., 2018). The implementation of sustainability accounting at ITS, in this context, strengthens their position as a socially responsible university and proactive in facing global environmental challenges.

Perspective from Institutional Theory

Institutional theory provides an understanding that higher education institutions, like other organizations, are influenced by norms, regulations, and external pressures from various parties, such as the government, accreditation bodies, professional associations, and the broader society (Nwoba et al., 2021). Higher education institutions do not operate in a vacuum; rather, they exist within a social, political, and economic ecosystem that influences how these institutions function and adapt. In this case, the implementation of sustainability accounting becomes a response to institutional pressures that encourage higher education institutions to adopt practices aligned with sustainability principles, whether in environmental, social, or economic terms (Andrades et al., 2024). This pressure can come in the form of regulations requiring sustainability reports, societal demands for transparency, as well as standards set by accreditation bodies expecting a commitment to social and environmental responsibility. The implementation of sustainability accounting in this context not only aims to meet external demands but also serves to maintain the legitimacy and competitiveness of universities in the global market, which increasingly prioritizes sustainability as an important indicator (Kuruppu et al., 2019). By openly reporting sustainability performance, universities not only demonstrate compliance with prevailing norms but also affirm their commitment to achieving the Sustainable Development Goals (SDGs), which are increasingly becoming a global benchmark for institutions that wish to maintain their relevance and contribution to society and the planet. In this case, sustainability accounting becomes a crucial instrument for higher education institutions to effectively manage institutional pressures, whether they stem from government regulations, societal demands, global standards, or expectations from internal stakeholders such as students and academic staff.

Amid increasing pressure to be socially and environmentally responsible, higher education institutions can no longer operate with a business-as-usual approach. They are required to demonstrate that all operational activities, policies, and development strategies are on a sustainable path and aligned with the values of transparency, ethics, and accountability. Sustainability accounting provides a framework that enables institutions to systematically identify areas of risk and opportunity, measure the impact of various activities, and prepare reports that reflect their commitment to sustainability (Farooq et al., 2021). Through this reporting in sustainability context, universities can proactively respond to external pressures, build credibility, and strengthen their bargaining position in the arena of public policy and strategic cooperation. On the other hand, sustainability accounting also helps maintain a balance between external demands and internal capacities, allowing institutions to remain adaptive yet consistent in directing their steps towards sustainable development goals (Hörisch et al., 2020).

Moreover, sustainability accounting can also be considered a proactive approach in meeting the demands of stakeholders who increasingly require transparency and social responsibility (Hörisch et al., 2020). Higher education institutions that implement sustainability accounting not only demonstrate their compliance with external norms but also indicate their readiness to adapt to changes in the global society, where sustainability has now become one of the main indicators in assessing organizational performance. In this framework, sustainability accounting also strengthens universities' commitment to sustainable development goals (SDGs), showing that they are not only involved in the processes of education and research but also play an active role in addressing social and environmental challenges (Ayuso et al., 2022). Sustainability accounting, therefore, not only serves as a technical tool for performance reporting but also

becomes a symbol of institutional legitimacy that reflects the moral and social responsibility of a university in the eyes of the public. Through sustainability accounting, institutions can demonstrate that they can manage resources—be it natural, human, or financial—wisely and responsibly, while minimizing negative impacts and maximizing positive contributions to society and the environment (Ayuso et al., 2022). This practice creates value that is not only economic but also social and ecological, which is very important in building long-term trust. When sustainability accounting is integrated into governance systems and decision-making processes, institutions not only maintain the legitimacy they have achieved but also strengthen their position as adaptive and relevant organizations in facing the dynamics of the times. With the increasing global pressure for sustainability—from the climate crisis to social inequality—the ability to demonstrate accountability and commitment through sustainability accounting becomes a strategic advantage that distinguishes higher education institutions from others. Therefore, strengthening sustainability accounting is an important investment in building a more sustainable, inclusive, and competitive future for higher education institutions (Ayuso et al., 2022; Minutolo et al., 2020).

From the perspective of institutional theory, the implementation of sustainability accounting at universities in Indonesia is very important because higher education institutions as social institutions are not only influenced by market pressures and internal efficiency but also by the norms, values, and expectations prevailing in their institutional environment (Ferrero-Ferrero et al., 2018). Institutional theory emphasizes that organizations will adapt to practices that are considered legitimate and align with the dominant norms in their society or sector, in order to gain legitimacy, stability, and support from their environment (Kuruppu et al., 2019). In this context, sustainability accounting becomes an important mechanism to adapt to institutional pressures originating from the government (regulations and green policies), higher education associations (sustainability reporting standards), ranking institutions (such as UI GreenMetric), and the increasing public expectations regarding social and environmental responsibility. Universities in Indonesia, such as University of Airlangga (Unair), have responded to this pressure by integrating sustainability principles into campus management and activity reporting. Unair, for example, has developed the Green Campus program and published sustainability activity reports to demonstrate alignment with national and international standards expected of modern educational institutions. They also actively participate in national and global forums related to sustainable education, as a form of adjustment to evolving institutional norms. Through the adoption of sustainability reporting practices, universities not only enhance transparency and accountability but also solidify their position as relevant, adaptive, and credible institutions. Thus, sustainability accounting serves as a strategic response to institutional pressures while also building a positive institutional reputation amidst the evolving dynamics of regulation and public expectations (Ferrero-Ferrero et al., 2018).

Perspective from Tripple Bottom Line Concept

Additionally, the triple bottom line (TBL) theory emphasizes the importance of evaluating organizational performance through three main dimensions: economic, social, and environmental (Ho & Taylor, 2007; Hussain et al., 2018). This theory encourages universities to view their performance holistically, not only focusing on financial gains but also on the social impacts generated, such as contributions to community welfare, as well as the environmental impacts resulting from their academic and operational activities. In this context, sustainability accounting provides a framework that allows higher

education institutions to measure and report their performance in these three dimensions in an integrated manner. Thus, sustainability accounting is not limited to reporting financial results but also includes the efforts of universities in managing and reducing environmental impacts as well as creating broader social value (Clifford & Petrescu, 2012). One of the main focuses in sustainability accounting is carbon footprint reduction, which includes efforts to optimize energy use, switch to renewable energy sources, and reduce greenhouse gas emissions generated by campus operational activities (de Villiers et al., 2014; Herth & Blok, 2022; Porporato & Samuels-Jones, 2023). Additionally, efficient waste management also becomes an important part, with the aim of minimizing waste sent to landfills and maximizing recycling and waste reduction. On the social side, sustainability accounting includes measuring and reporting on the extent to which universities are committed to diversity and inclusivity, both in terms of student admissions, faculty recruitment policies, and programs that support equality and active participation from marginalized groups. Equally important, universities are also expected to demonstrate their contribution to community welfare, whether through community service programs, impactful research, or efforts to create a healthy, safe campus environment that supports individual development (Adams et al., 2018; Winkler et al., 2022). All these efforts, recorded in the sustainability accounting system, provide a holistic picture of the university's commitment to sustainability, not only in economic aspects but also in environmental and social terms, which ultimately strengthens institutional reputation and legitimacy (Amaral et al., 2015; Lehmann et al., 2009).

Through the TBL approach, universities can evaluate the extent to which they are responsible to all stakeholders and contribute to sustainable development (Mawonde & Togo, 2019). Moreover, reporting that encompasses these three dimensions can enhance transparency, accountability, and strengthen the institution's reputation, as it demonstrates that the university not only prioritizes profit or academic success but is also committed to creating a sustainable positive impact on society and the environment (Hernandez-Diaz et al., 2024). Thus, sustainability accounting, in the context of the triple bottom line theory, becomes a very important tool for universities to align their long-term goals with global sustainability objectives that encompass three main dimensions: economic, social, and environmental. The triple bottom line theory emphasizes that the success of an organization is not only measured by financial profit (economic bottom line), but also by its impact on society (social bottom line) and the environment (environmental bottom line) (Hussain et al., 2018). In this regard, sustainability accounting enables universities to monitor and measure their performance in these three dimensions in an integrated manner. Economically, universities can report on how they manage resources efficiently, increase sustainable revenue, and contribute to the local economy through industry collaboration and innovation. On the social side, universities can demonstrate how they support diversity, equity, and community well-being, as well as actively participate in social empowerment and poverty alleviation. In the environmental dimension, sustainability accounting helps universities reduce their carbon footprint, manage natural resources sustainably, and mitigate negative impacts on ecosystems. By using sustainability accounting as a framework, universities can integrate sustainability principles into their vision, mission, and long-term strategies, ensuring that they not only contribute to global sustainable development but also remain relevant and responsible at the local level (Lozano et al., 2013).

The implementation of sustainability accounting at universities in Indonesia is very important from the perspective of the TBL concept because this concept emphasizes that the success of an organization is not only measured by economic aspects but also by its contributions to social and environmental aspects (Mawonde & Togo, 2019). Universities, as educational institutions and agents of social change, have the responsibility to operate in a balanced and sustainable manner across these three dimensions: profit (economic), people (social), and planet (environment) (Amaral et al., 2015). In this context, sustainability accounting plays a crucial role as a tool to identify, measure, and report the impact of all university activities on the three pillars of TBL (Mader et al., 2013). For example, from an economic perspective, universities need to demonstrate the efficiency of public fund management and their contribution to local economic development (Shawe et al., 2019). From a social perspective, they must pay attention to the welfare of students, staff, and the impact of community service programs. On the environmental side, the university must manage energy, water, and waste responsibly.

As a concrete example, Brawijaya University (UB) has implemented various programs that reflect the TBL approach, such as community-based research development (social aspect), student entrepreneurship programs (economic aspect), and green campus management and environmentally friendly waste processing systems (environmental aspect). Through sustainability accounting reporting, UB can integratively demonstrate how their academic and administrative activities add value not only in terms of academic achievements but also in social impact and environmental preservation. This approach strengthens the university's position as an institution that is holistically responsible and aligned with the principles of sustainable development (Sen et al., 2021; Shawe et al., 2019). Therefore, the implementation of Triple Bottom Line-based sustainability accounting becomes very important for universities in Indonesia to demonstrate their real contributions to inclusive and sustainable development at both local and global levels.

CONCLUSION

This study has developed a series of theoretical arguments to explain in depth why the implementation of sustainability accounting is crucial in the context of higher education institutions in Indonesia. These arguments are built by referring to theories that have been widely used in sustainability accounting research, such as legitimacy theory, stakeholder theory, institutional theory, and the triple bottom line concept. Each theory provides a different yet complementary framework for understanding how and why higher education institutions need to integrate sustainability into their reporting systems. The legitimacy theory explains the importance of building public trust through operational transparency, while the stakeholder theory emphasizes the importance of meeting the expectations of various stakeholders regarding educational institutions. Institutional theory highlights how external pressures can drive institutional change towards more sustainable practices, while the triple bottom line emphasizes the need for performance reporting in three main dimensions: economic, social, and environmental. By integrating these theoretical perspectives, this study is expected to provide a new viewpoint for policymakers, both at the institutional and national levels, in understanding the urgency and long-term benefits of implementing sustainability accounting in the higher education environment. The theoretical arguments presented not only provide a conceptual foundation but can also serve as a starting point for policy development, guideline

formulation, or other strategic initiatives that support the transformation of higher education institutions in Indonesia towards more transparent, responsible, and sustainability-oriented governance.

This study emphasizes the importance of implementing sustainability accounting in higher education institutions through the development of theoretical arguments based on various conceptual approaches in accounting science and institutional management. By referring to legitimacy theory, stakeholder theory, institutional theory, and the triple bottom line concept, this study demonstrates that higher education institutions have responsibilities not only in the aspects of education and research but also in demonstrating socially and environmentally accountable performance to the public. Sustainability accounting serves as a comprehensive reporting instrument, enabling institutions to transparently communicate their impact on society and the environment, while simultaneously strengthening institutional legitimacy and accountability.

Although this practice has developed globally, its application in the context of Indonesia is still limited and faces various challenges, such as low awareness, resource constraints, and the absence of a regulatory framework that encourages formal adoption. Therefore, the arguments presented in this study are expected to serve as a useful conceptual reference for stakeholders, including policymakers, university leaders, and professional associations, in formulating strategies and policies that support the integration of sustainability accounting in the governance of higher education institutions. In the future, the implementation of sustainability accounting will not only be an option but a strategic necessity to ensure that higher education institutions actively contribute to sustainable development and meet social expectations in an era that increasingly demands transparency and accountability.

IMPLICATION/LIMITATION AND SUGGESTIONS

This study implies strengthening the argument that higher education institutions can and should implement sustainability accounting not solely based on the availability of financial, technical, or human resources, but also grounded in the moral responsibility as public entities that play a strategic role in shaping societal values and behaviors. Higher education institutions hold a unique position as centers of knowledge, education, and innovation that directly or indirectly influence the direction of social and environmental development. Therefore, commitment to sustainability practices through transparent and accountable reporting is part of the ethical commitment to current and future generations. This argument places moral responsibility on par with managerial and operational considerations in the decision-making process related to institutional sustainability. The implementation of sustainability accounting in this context becomes a tangible form of institutional integrity—an effort to show that universities not only talk about sustainability in academic discourse but also practice it in real life. Thus, this study reinforces the idea that sustainability in higher education is not merely a project dependent on resource completeness, but rather an ethical call and institutional responsibility that must be consistently realized.

In general, this study does not have significant limitations in terms of constructing theoretical arguments because the approach used is conceptual and based on the synthesis of relevant literature. However, it should be acknowledged that most of the previous research findings referenced in this study are still dominated by academic works from foreign researchers, especially from countries that have systematically developed sustainability accounting practices and studies earlier. This condition reflects a gap in the local literature, particularly regarding the implementation of sustainability accounting in higher

education institutions in Indonesia. However, in the context of contextual scientific and policy development, research topics related to the characteristics, challenges, and opportunities in the national higher education environment should also be built on the findings and experiences of domestic researchers. Thus, this study indirectly highlights the need for increased contributions from Indonesian academics in producing locally-based research that discusses sustainability practices in higher education institutions.

The results of this study can serve as a basis for stakeholders to develop standards and guidelines to support the implementation of sustainability accounting in higher education institutions in Indonesia. The theoretical arguments developed in this study provide a conceptual foundation that can be translated into a more operational policy or regulatory framework. With clear standards and guidelines, higher education institutions will have a structured direction in consistently and accountably implementing sustainability reporting practices. These standards can also serve as a tool in the process of institutional evaluation and accreditation, as well as a guide in the preparation of the institution's annual reports, which not only cover financial aspects but also social and environmental performance. Furthermore, the development of these guidelines can also encourage the transformation of organizational culture in higher education environments, so that sustainability becomes an integrated part of governance, strategic planning, and academic activities. Thus, this study has a significant practical contribution as an initial trigger for the formation of an institutional framework that supports the systemic implementation of sustainability accounting in Indonesia.

ACKNOWLEDGMENT

The authors would like to express their gratitude to the management of the Faculty of Economics at Ganesha University of Education for their commitment to supporting the implementation of this study. In addition, the authors would like to express their profound gratitude to the various other parties who have contributed to the process of this study, both through scientific discussions, conceptual input, as well as technical and administrative assistance. The effective preparation of this study would not have been possible without the collaboration and support from these various parties. It is hoped that the results of this study will provide benefits for academic development and institutional practice, and become part of a real contribution in encouraging sustainability in Indonesia's higher education environment.

REFERENCES

- Adams, R., Martin, S., & Boom, K. (2018). University culture and sustainability: Designing and implementing an enabling framework. *Journal of Cleaner Production*, 171, 434–445. https://doi.org/10.1016/J.JCLEPRO.2017.10.032
- Ahonen, V. L., Woszczek, A., Baumeister, S., Helimo, U. T., Jackson, A. K., Kopsakangas-Savolainen, M., Kääriä, J., Lehtonen, T., Luoranen, M., Pongrácz, E., Soukka, R., Vainio, V., & El Geneidy, S. (2024). Carbon neutral higher education institutions: a reality check, challenges and solutions. *International Journal of Sustainability in Higher Education*, 25(9), 293–315. https://doi.org/10.1108/IJSHE-11-2023-0515/FULL/PDF
- Al-Hazaima, H., Alshurafat, H., Al Shbail, M. O., & Ananzeh, H. (2024). Stakeholders' perceptions of sustainability accounting education: A literature review. Technological Innovations for Business,

- Education and Sustainability, 79–89. https://doi.org/10.1108/978-1-83753-106-620241006/FULL/XML
- Amaral, L. P., Martins, N., & Gouveia, J. B. (2015). Quest for a sustainable university: A review. *International Journal of Sustainability in Higher Education*, 16(2), 155–172. https://doi.org/10.1108/IJSHE-02-2013-0017/FULL/XML
- An, Y., Davey, H., Harun, H., An, Y., Davey, H., & Harun, H. (2017). Sustainability Reporting at a New Zealand Public University: A Longitudinal Analysis. Sustainability, 9(9), 1529. https://doi.org/10.3390/su9091529
- Andon, P., Baxter, J., & Chua, W. F. (2015). Accounting for Stakeholders and Making Accounting Useful. *Journal of Management Studies*, 52(7), 986–1002. https://doi.org/10.1111/JOMS.12142
- Andrades, J., Martinez-Martinez, D., & Larrán, M. (2024). Sustainability reporting, institutional pressures and universities: evidence from the Spanish setting. *Sustainability Accounting, Management and Policy Journal*, ahead-of-print(ahead-of-print). https://doi.org/10.1108/SAMPJ-07-2023-0455/FULL/PDF
- Ayuso, S., Carbonell, X., & Serradell, L. (2022). Assessing universities' social sustainability: accounting for stakeholder value. *International Journal of Sustainability in Higher Education*, 23(2), 443–457. https://doi.org/10.1108/IJSHE-12-2020-0509/FULL/XML
- Barth, M., Godemann, J., Rieckmann, M., & Stoltenberg, U. (2007). Developing key competencies for sustainable development in higher education. International *Journal of Sustainability in Higher Education*, 8(4), 416–430. https://doi.org/10.1108/14676370710823582
- Bayhantopcu, E., & Aymerich Ojea, I. (2024). Integrated sustainability management and equality practices in universities: A case study of Jaume I University. *International Journal of Sustainability in Higher Education*, 25(3), 631–648. https://doi.org/10.1108/IJSHE-02-2023-0054/FULL/XML
- Bebbington, J., Larrinaga-González, C., & Moneva-Abadía, J. M. (2008). Legitimating reputation/the reputation of legitimacy theory. Accounting, Auditing & Accountability Journal, 21(3), 371–374. https://doi.org/10.1108/09513570810863969
- Belal, A. R., & Roberts, R. W. (2010). Stakeholders' Perceptions of Corporate Social Reporting in Bangladesh. *Journal of Business Ethics*, 97(2), 311–324. https://doi.org/10.1007/s10551-010-0511-4
- Ceulemans, K., Molderez, I., & Van Liedekerke, L. (2015). Sustainability reporting in higher education: a comprehensive review of the recent literature and paths for further research. *Journal of Cleaner Production*, 106, 127–143. https://doi.org/10.1016/J.JCLEPRO.2014.09.052
- Cho, C. H., & Costa, E. (2024). Sustainability accounting education: challenges and outlook. International *Journal of Sustainability in Higher Education*, 25(7), 1412–1425. https://doi.org/10.1108/IJSHE-02-2024-0152/FULL/XML

- Clifford, D., & Petrescu, C. (2012). The keys to university–community engagement sustainability. Nonprofit Management and Leadership, 23(1), 77–91. https://doi.org/10.1002/NML.21051
- de Silva, K., Senarath Yapa, P. W., & Vesty, G. (2020). The Impact of Accountability Mechanisms on Public Sector Environmental Sustainability Performance: A Case Study of Sri Lanka. *Australasian Accounting, Business and Finance Journal*, 14(3), 38–55. https://doi.org/10.14453/aabfj.v14i3.4
- de Villiers, C., Chen, S., jin, C., & Zhu, Y. (2014). Carbon sequestered in the trees on a university campus:

 A case study. *Sustainability Accounting, Management and Policy Journal*, 5(2), 149–171. https://doi.org/10.1108/SAMPJ-11-2013-0048/FULL/XML
- Di Tullio, P., Valentinetti, D., Nielsen, C., & Rea, M. A. (2020). In search of legitimacy: a semiotic analysis of business model disclosure practices. *Meditari Accountancy Research*, 28(5), 863–887. https://doi.org/10.1108/MEDAR-02-2019-0449/FULL/HTML
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. Sociological Perspectives, 18(1), 122–136. https://doi.org/10.2307/1388226
- Farooq, M. B., Zaman, R., & Nadeem, M. (2021). AccountAbility's AA1000AP standard: a framework for integrating sustainability into organisations. *Sustainability Accounting, Management and Policy Journal*, 12(5), 1108–1139. https://doi.org/10.1108/SAMPJ-05-2020-0166/FULL/HTML
- Ferrero-Ferrero, I., Fernández-Izquierdo, M. Á., Muñoz-Torres, M. J., & Bellés-Colomer, L. (2018). Stakeholder engagement in sustainability reporting in higher education: An analysis of key internal stakeholders' expectations. *International Journal of Sustainability in Higher Education*, 19(2), 313–336. https://doi.org/10.1108/IJSHE-06-2016-0116/FULL/XML
- Galleli, B., Teles, N. E. B., Santos, J. A. R. dos, Freitas-Martins, M. S., & Hourneaux Junior, F. (2022). Sustainability university rankings: a comparative analysis of UI green metric and the times higher education world university rankings. *International Journal of Sustainability in Higher Education*, 23(2), 404–425. https://doi.org/10.1108/IJSHE-12-2020-0475/FULL/XML
- Hernandez-Diaz, P. M., Polanco, J. A., Osuna-Ramírez, S. A., Jaillier-Castrillón, E., Molina-Velasquez, T., & Escobar-Sierra, M. (2024). Incidence of sustainability in university performance: evidence of stakeholders' perceptions at Colombian private higher education institutions. *International Journal of Sustainability in Higher Education*, 25(2), 416–443. https://doi.org/10.1108/IJSHE-08-2022-0264/FULL/XML
- Herth, A., & Blok, K. (2022). Quantifying universities' direct and indirect carbon emissions the case of Delft University of Technology. *International Journal of Sustainability in Higher Education*, 24(9), 21–52. https://doi.org/10.1108/IJSHE-04-2022-0121/FULL/PDF
- Ho, L. C. J., & Taylor, M. E. (2007). An Empirical Analysis of Triple Bottom-Line Reporting and its Determinants: Evidence from the United States and Japan. *Journal of International Financial Management & Accounting*, 18(2), 123–150. https://doi.org/10.1111/J.1467-646X.2007.01010.X

- Hörisch, J., Schaltegger, S., & Freeman, R. E. (2020). Integrating stakeholder theory and sustainability accounting: A conceptual synthesis. *Journal of Cleaner Production*, 275, 124097. https://doi.org/10.1016/J.JCLEPRO.2020.124097
- Huang, T., Pepper, M., & Bowrey, G. (2014). Implementing a Sustainability Balanced Scorecard to Contribute to the Process of Organisational Legitimacy Assessment. *Australasian Accounting, Business and Finance Journal*, 8(2), 15–34. https://doi.org/10.14453/aabfj.v8i2.3
- Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance. *Journal of Business Ethics*, 149(2), 411–432. https://doi.org/10.1007/s10551-016-3099-5
- Juusola, K., & Srouji, R. (2023). Challenges associated with sustainability accounting and reporting practices: a legitimacy perspective. *International Journal of Law and Management*, 65(1), 64–87. https://doi.org/10.1108/IJLMA-06-2022-0113/FULL/XML
- Kuruppu, S. C., Milne, M. J., & Tilt, C. A. (2019). Gaining, maintaining and repairing organisational legitimacy: When to report and when not to report. *Accounting, Auditing & Countability Journal*, 32(7), 2062–2087. https://doi.org/10.1108/AAAJ-03-2013-1282
- Lang, T. (2015). Campus sustainability initiatives and performance: Do they correlate? *International Journal of Sustainability in Higher Education*, 16(4), 474–490. https://doi.org/10.1108/IJSHE-01-2014-0009/FULL/XML
- Lehmann, M., Christensen, P., Thrane, M., & Jørgensen, T. H. (2009). University engagement and regional sustainability initiatives: some Danish experiences. *Journal of Cleaner Production*, 17(2), 1067–1074. https://doi.org/10.1016/j.jclepro.2009.03.013
- Lozano, R., Lukman, R., Lozano, F. J., Huisingh, D., & Lambrechts, W. (2013). Declarations for sustainability in higher education: becoming better leaders, through addressing the university system. *Journal of Cleaner Production*, 48, 10–19. https://doi.org/10.1016/j.jclepro.2011.10.006
- Mader, C., Scott, G., & Abdul Razak, D. (2013). Effective change management, governance and policy for sustainability transformation in higher education. Sustainability Accounting, *Management and Policy Journal*, 4(3), 264–284. https://doi.org/10.1108/SAMPJ-09-2013-0037/FULL/XML
- Mawonde, A., & Togo, M. (2019). Implementation of SDGs at the University of South Africa. *International Journal of Sustainability in Higher Education*, 20(5), 932–950. https://doi.org/10.1108/IJSHE-04-2019-0156/FULL/XML
- Minutolo, M. C., Ivanova, A., & Cong, M. (2020). Signaling sustainability: impact that learning how to report has on enrollment, endowment, and emissions of North American higher education institutions. *Sustainability Accounting, Management and Policy Journal*, 12(5), 1140–1158. https://doi.org/10.1108/SAMPJ-06-2020-0224/FULL/XML
- Nicolò, G., Aversano, N., Sannino, G., & Tartaglia Polcini, P. (2023). Online sustainability disclosure practices in the university context. The role of the board of directors. Corporate Governance (Bingley), 23(4), 800–826. https://doi.org/10.1108/CG-05-2022-0224/FULL/PDF

- Nwoba, A. C., Boso, N., & Robson, M. J. (2021). Corporate sustainability strategies in institutional adversity: Antecedent, outcome, and contingency effects. Business Strategy and the Environment, 30(2), 787–807. https://doi.org/10.1002/bse.2654
- Porporato, M., & Samuels-Jones, T. (2023). Carbon emissions measurement as intra-action: incentives to disclose air emissions at a Canadian university. *International Journal of Sustainability in Higher Education*, 24(7), 1540–1560. https://doi.org/10.1108/IJSHE-12-2021-0497/FULL/XML
- Roberts, R. W. (1992). Determinants of corporate social responsibility disclosure: An application of stakeholder theory. Accounting, Organizations and Society, 17(6), 595–612.
- Saha, A. K., Dunne, T., & Dixon, R. (2021). Carbon disclosure, performance and the green reputation of higher educational institutions in the UK. *Journal of Accounting and Organizational Change*, 17(5), 604–632. https://doi.org/10.1108/JAOC-09-2020-0138/FULL/XML
- Sen, G., Chau, H. W., Tariq, M. A. U. R., Muttil, N., & Ng, A. W. M. (2021). Achieving Sustainability and Carbon Neutrality in Higher Education Institutions: A Review. Sustainability 2022, Vol. 14, Page 222, 14(1), 222. https://doi.org/10.3390/SU14010222
- Sepasi, S., Braendle, U., & Rahdari, A. H. (2019). Comprehensive sustainability reporting in higher education institutions. *Social Responsibility Journal*, 15(2), 155–170. https://doi.org/10.1108/SRJ-01-2018-0009/FULL/XML
- Shan, Y. G., Zhang, J., Alam, M., & Hancock, P. (2022). Does sustainability reporting promote university ranking? Australian and New Zealand evidence. *Meditari Accountancy Research*, 30(6), 1393–1418. https://doi.org/10.1108/MEDAR-11-2020-1060
- Shawe, R., Horan, W., Moles, R., & O'Regan, B. (2019). Mapping of sustainability policies and initiatives in higher education institutes. Environmental Science & Policy, 99, 80–88. https://doi.org/10.1016/J.ENVSCI.2019.04.015
- Shen, H., Ng, A. W., Zhang, J., & Wang, L. (2020). Sustainability accounting, management and policy in China: recent developments and future avenues. Sustainability Accounting, Management and Policy Journal, 11(5), 825–839. https://doi.org/10.1108/SAMPJ-03-2020-0077/FULL/HTML
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. The Academy of Management Review, 20(3), 571. https://doi.org/10.2307/258788
- Tilling, M. V. (2004). Some thoughts on legitimacy theory in social and environmental accounting. *Social and Environmental Accountability Journal*, 24(2), 3–7. https://doi.org/10.1080/0969160X.2004.9651716
- Vien, H., & Galik, C. S. (2024). Individual and interlinked SDGs: higher education institutions and metro area sustainability performance. *International Journal of Sustainability in Higher Education*, 25(5), 962–987. https://doi.org/10.1108/IJSHE-06-2023-0231/FULL/XML

- Winkler, K. J., Bennett, E., & Chestnutt, H. R. (2022). Mapping social structures for sustainability transformation at McGill University, Canada. *International Journal of Sustainability in Higher Education*, 23(6), 1209–1228. https://doi.org/10.1108/IJSHE-04-2021-0164/FULL/XML
- Wright, T. S. A. (2002). Definitions and frameworks for environmental sustainability in higher education. *International Journal of Sustainability in Higher Education*, 3(3), 203–220. https://doi.org/10.1108/14676370210434679