Call for Papers: Transforming Management Accounting for a Bioeconomy

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<u>Contribution proposal</u>: October 15, 2023 <u>Feedback on proposals</u>: November 15, 2023 <u>Submission deadline</u>: January 31, 2024 <u>Anticipated publication date</u>: Early-2025

Introduction

Sustainability innovations are considered an important driver to create a safer, more resilient natural and social environment. Accounting has played an important role towards sustainability (Gray & Bebbington, 2001) with an impact on production processes and supply chains (Burritt & Schaltegger, 2014). One key area of sustainability innovations which aims at transforming current production systems is the transition to a bioeconomy (Bröring et al., 2020), as introduced and updated in 2018 by the European Union (Lühmann, 2020) and adopted by 60 countries so far (Aquilar & Twardowski, 2022). Bioeconomy, or bio-based economy, is an economy that relies only on renewable natural resources, bio-based processes, and biomass, and that maintains or restores its bio-capacity (El-Chichakli et al., 2016). It is an economy that does not depend on non-renewable natural resources, that causes zero negative impacts and emissions, enhances food security, secures, and restores biodiversity, promotes circularity, and creates jobs (Patermann and Aguilar, 2018).

Bioeconomy, as a field of research, has been explored intensively in science, but not to the same extent in social sciences (Sanz-Hernández et al., 2019). The role of accounting and accountability for bioeconomy seems to have been rarely discussed in the literature, and only through the lens of circular economy (Di Vaio et al., 2023). Sustainability management accounting has been developed and discussed to support decision-makers in the transformation of their businesses towards sustainability (Schaltegger & Burritt, 2017). More recently, the necessity to develop and purposefully link sustainability management accounting with meso-(e.g., guidelines issued by industry associations, standards) and macro-levels (e.g., planetary boundaries or UN SDGs) beyond organizational boundaries has been emphasized (Schaltegger et al., 2022). Management accounting approaches that link sustainability innovations and business actions with planetary boundaries and ecosystems could support decision makers in pursuing an

effective transformation towards a bioeconomy, combined with the SDGs accomplishment (Heimann, 2019).

The transition to a bioeconomy creates many challenges for businesses that currently still rely on fossil fuels, requiring changes in production processes, including cleaner production systems, and changing to renewable inputs (Sanz-Hernández et al., 2019) to transform to an economy that functions in the safe operating space of planetary boundaries (Liobikiene et al., 2020). To achieve such transition will require new technologies (Golembiewski et al., 2015) as well as new, sustainable business models (D'Amato et al., 2020) and new (management) accounting systems.

So far, research on bioeconomy has focused on its implications to the meso and macro level of a linear economy (Sinnko et al., 2023, Sharma et al., 2023, Marcone et al., 2022), while research on business and bioeconomy has focused on business models (Salvador, 2021), how managers perceive the concept of bioeconomy (Eckert, 2021; Näyhä, 2019), and the lack of knowledgeable managers that can help such a transition (Ciriminna, 2022). A significant lack in the business and accounting literature seems to be the analysis of sustainability reporting for measuring and disclosing progress towards a bioeconomy (Opferkuch et al., 2021). Furthermore, management control and bioeconomy have never been conceptually investigated nor empirically (Crutzen et al., 2017). Svensson and Funck (2019) theorize the adaptation of management control to circular business models, but do not extend their discussion to bioeconomy. Thus, while business and accounting research have dealt with circular economy approaches (Svensson & Funck, 2019; Di Vaio et al., 2023), research on the role of management accounting, reporting, and management control towards a bioeconomy remains underdeveloped.

Aim and Scope of the Special Issue

This special issue aims to address key questions of how management accounting could support a transition of businesses towards a bioeconomy. What is the role of management accounting in guiding a business transition towards a bioeconomy? What information do managers need to realize such a transformation of their businesses? How can business measure the progress towards a bioeconomy? How can management accounting research on circular economy integrate the transition to a bioeconomy?

Potential Themes

With this special issue, we intend to address the above and other relevant questions dealing with how information management, management accounting and management control can or could support a transformation of businesses, product systems and the economy towards a bioeconomy. It welcomes participants and non-participants of the 27th Conference of the Environmental and Sustainability Management Accounting Network (EMAN 2023) conference to submit their work for review. Contributions may include themes such as (not encompassing):

- Theoretical or methodological papers that examine the rationality of a sustainability management accounting approach to a bioeconomy.
- Approaches that explore the impact of management accounting for a bioeconomy on the social aspect of sustainability.
- Interdisciplinary approaches that reflect the potential of sustainability management accounting to enhance and extend conventional accounting systems with a bioeconomy

dimension.

- Review and empirical papers that examine the potential of an indicators' system for bioeconomy reporting.
- Theoretical or methodological papers that discuss management control approaches towards bioeconomy business models.
- Methodological papers that address the interaction between society and business in the transition to a bioeconomy and how that influences management accounting within business.

Instructions for submissions

Submissions are welcome from a variety of theoretical, methodological, and disciplinary perspectives, as long as they are closely in line with the topic of the Special Issue. Authors are strongly encouraged to refer to the BASR's submission guidelines for detailed instructions on submitting a paper to this Special Issue. Papers must be original and unpublished. They can have up to 10,000 words and must follow the editorial style of *Business and Society Review* which are found at https://onlinelibrary.wiley.com/page/journal/14678594/homepage/forauthors.html.

The Guest Editors invite potential contributors to this issue to send a short proposal via email to Konstantinos G. Papaspyropoulos (kodafype@for.auth.gr) by October 15, 2023. Feedback will be provided regarding the suitability of the proposed contribution by November 15, 2023.

All papers must be submitted via BASR's ScholarOne Manuscripts site (https://mc.manuscriptcentral.com/basr) by January 31, 2024. Please be sure to indicate that the paper is for this Special Issue during the submission process.

References

- Aguilar, A., & Twardowski, T. (2022). Bioeconomy in a changing world. *EFB Bioeconomy Journal*, 2, 100041.
- Bröring, S., Laibach, N., & Wustmans, M. (2020). Innovation types in the bioeconomy. *Journal of Cleaner Production*, 266, 121939.
- Burritt, R., & Schaltegger, S. (2014). Accounting towards sustainability in production and supply chains. *The British Accounting Review*, 46(4), 327-343.
- Ciriminna, R., Albanese, L., Meneguzzo, F., & Pagliaro, M. (2022). Educating the managers of the bioeconomy. *Journal of Cleaner Production*, 366, 132851.
- Crutzen, N., Zvezdov, D., & Schaltegger, S. (2017). Sustainability and management control. Exploring and theorizing control patterns in large European firms. *Journal of Cleaner Production*, 143, 1291-1301.
- D'Amato, D., Veijonaho, S., & Toppinen, A. (2020). Towards sustainability? Forest-based circular bioeconomy business models in Finnish SMEs. *Forest Policy and Economics*, 110, 101848.
- Di Vaio, A., Hasan, S., Palladino, R., & Hassan, R. (2023). The transition towards circular economy and waste within accounting and accountability models: A systematic literature review and conceptual framework. *Environment, Development and Sustainability*, 25(1), 734-810.
- Eckert, S. (2021). Varieties of framing the circular economy and the bioeconomy: unpacking business interests in European policymaking. *Journal of Environmental Policy & Planning*, 23(2), 181-193.
- El-Chichakli, B., von Braun, J., Lang, C., Barben, D., & Philp, J. (2016). Policy: Five cornerstones of a global bioeconomy. *Nature*, 535(7611), 221-223.
- Golembiewski, B., Sick, N., & Bröring, S. (2015). The emerging research landscape on bioeconomy: What has been done so far and what is essential from a technology and innovation management perspective?. *Innovative Food Science & Emerging Technologies*, 29, 308-317.
- Gray, R., & Bebbington, J. (2001). Accounting for the Environment. Sage.
- Heimann, T. (2019). Bioeconomy and SDGs: Does the bioeconomy support the achievement of the SDGs?. *Earth's Future*, 7(1), 43-57.
- Liobikiene, G., Chen, X., Streimikiene, D., & Balezentis, T. (2020). The trends in bioeconomy development in the European Union: Exploiting capacity and productivity measures based on the land footprint approach. *Land Use Policy*, 91, 104375.
- Lühmann, M. (2020). Whose European bioeconomy? Relations of forces in the shaping of an updated EU bioeconomy strategy. *Environmental Development*, 35, 100547.
- Näyhä, A. (2019). Transition in the Finnish forest-based sector: Company perspectives on the bioeconomy, circular economy and sustainability. *Journal of Cleaner Production*, 209, 1294-1306.
- Opferkuch, K., Caeiro, S., Salomone, R., & Ramos, T. B. (2021). Circular economy in corporate sustainability reporting: A review of organisational approaches. *Business Strategy and the Environment*, 30(8), 4015-4036.
- Patermann, C., & Aguilar, A. (2018). The origins of the bioeconomy in the European Union. *New Biotechnology*, 40, 20-24.

- Salvador, R., Puglieri, F. N., Halog, A., de Andrade, F. G., Piekarski, C. M., & Antonio, C. (2021). Key aspects for designing business models for a circular bioeconomy. *Journal of Cleaner Production*, 278, 124341.
- Sanz-Hernández, A., Esteban, E., & Garrido, P. (2019). Transition to a bioeconomy: Perspectives from social sciences. *Journal of Cleaner Production*, 224, 107-119.
- Schaltegger, S. & Burritt, R. (2017) Contemporary environmental accounting: Issues, concepts and practice. London: Routledge.
- Schaltegger, S., Christ, K. L., Wenzig, J., & Burritt, R. L. (2022). Corporate sustainability management accounting and multi-level links for sustainability—A systematic review. *International Journal of Management Reviews*, 24(4), 480-500.
- Sharma, R., & Malaviya, P. (2023). Ecosystem services and climate action from a circular bioeconomy perspective. *Renewable and Sustainable Energy Reviews*, 175, 113164.
- Sinkko, T., Sanyé-Mengual, E., Corrado, S., Giuntoli, J., & Sala, S. (2023). The EU Bioeconomy Footprint: Using life cycle assessment to monitor environmental impacts of the EU Bioeconomy. *Sustainable Production and Consumption*. 37, 169-179.
- Svensson, N., & Funck, E. K. (2019). Management control in circular economy. Exploring and theorizing the adaptation of management control to circular business models. *Journal of Cleaner Production*, 233, 390-398.