

## Call for Papers

# Sustainability accounting, accountability and disclosure in a Circular Economy

Guest Editors

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### Submission deadline: 31/12/2022

There is an urgent need to reduce the climatic and environmental impact of both human production and consumption activities, with the aim of reaching carbon neutrality, decreasing the need for resources and protecting biodiversity, thus advancing towards a fully Circular Economy (CE) (Bocken *et al.*, 2016; Geissdoerfer *et al.*, 2017). The CE is gaining interest as a pathway to sustainable development among scholars, practitioners, and policymakers, fostering CE to achieve sustainable development goals (Pizzi *et al.*, 2020), a clear example being the European Union new Circular Economy Action Plan (COM/2020/98) (European Commission, 2020).

The CE seeks an efficient flow of resources - materials, energy, water, information - that conserves the resources in the productive cycle for as long as possible, creating circular loops in which resources are used repeatedly (Aranda-Usón *et al.*, 2018; Yuan *et al.*, 2008). In this scenario, different perspectives recognise the value of the CE as an alternative model to the linear one and as a path towards a low-carbon emission and zero-waste economy based on the convergence of economic and environmental principles (Ellen MacArthur Foundation, 2015a, 2015b; European Commission, 2015, 2020).

The CE can be considered as a form of environmental management operating on several levels: at the national or regional level (i.e. macro), the goal is to decouple economic growth from consumption; at the eco-industrial park level (meso-level), the goal is to promote regional development and protection of the natural environment (Scarpellini *et al.*, 2019); at the micro-level (or individual firm), the goal is to find cleaner production approaches to achieve more efficient use of raw materials and resources (Ghisellini *et al.*, 2016; Mathews & Tan, 2011; Murray *et al.*, 2015).

At the micro-level, the CE means the improvement of material intensity and energy saving and the introduction of renewables, reducing environmental impacts, and a high-efficiency rate of closing material loops (Van Berkel, 2010; Jun & Xiang, 2011). This model allows for added value and utility of products and materials to be maintained as long as possible, facilitating waste minimisation (Aranda-Usón *et al.*, 2018; Ellen MacArthur Foundation, 2015b; Scarpellini *et al.*, 2019).

In a triple bottom line framework (Elkington, 2004), companies that adopt a circular business model must consider CE's economic, environmental and social dimensions, and the measurement of its impacts at a micro-level is a relevant routine. Thus, by adopting a circular business model or introducing CE principles in businesses, changes are also envisaged in sustainability accounting (Scarpellini *et al.*, 2020; Llana-Macarulla *et al.*, 2023), reporting practices (Marco-Fondevila *et al.*, 2021; Barnabè & Nazir, 2021) and the measurement of CE-related activities

introduced by companies (Aranda-Usón *et al.*, 2020). Therefore, there is a need to improve new management and accounting tools to achieve these new-requirements (Schaltegger *et al.*, 2022; Yin *et al.*, 2012).

In this framework, some scholars have partially approached the three dimensions of sustainability of CE in businesses (Girard & Nocca, 2019; Hysa *et al.*, 2020; Iacovidou *et al.*, 2017; Kravchenko *et al.*, 2019; Scarpellini *et al.*, 2020). In the micro dimension, the implementation of CE principles impacts companies' environmental management and the linked changes in accounting systems, particularly in aspects related to sustainability accounting (Scarpellini *et al.*, 2020). In addition, society has increased its demand for corporations to mitigate the effects of their activities on the quality of life of local communities, and there is an increasing demand for information and accountability to shape the common good (Pesci *et al.*, 2020). Therefore, CE would imply changes to companies' environmental management and accounting practices regarding natural resources and the introduction of processes and controls to close the material loops. It is necessary to point out the role that accounting plays, through valuation, since “what is valued becomes a resource, while what is not valued is considered waste” (Larrinaga & Garcia-Torea, 2022).

Meanwhile, the influence of circular models on sustainability accounting is still an incipient line of enquiry. Generally, one or two of the three dimensions of sustainable development often prevail, with fewer social considerations (Kirchherr *et al.*, 2017). Notably, the measurement of the CE at the micro-level has to be expanded and specialised in sustainability accounting, accountability and reporting practices (Scarpellini, 2021).

Based on the previous arguments, the integration of the CE from the accounting perspective must lead to sustainability. This special issue aims to stimulate debate on implementing sustainability accounting in organisations, focusing on the implementation of the principles of CE and the implications it may have on an organisation's accounting and reporting practices. In particular, sustainability reporting and accountability, along with mandatory financial reporting, allow organizations to consider their impacts on a wide range of sustainability issues, including CE-related issues, and to be more transparent about related risks and opportunities. We, therefore, invite the submission of review papers, theoretical and empirical papers and will consider the full range of quantitative and qualitative methods and case studies. Essays and viewpoints are also welcome.

The following topic areas highlight potential research topics to be considered for this special issue, without intending to be exhaustive. In summary, editors will consider all high-quality papers related to the broader theme of sustainability accounting, accountability and reporting in a CE framework, environmental management accounting, measurement, assessment, disclosure, evaluation and management methods, as well as the analysis of performance for the material loops closing at micro-level:

- Reflections on accountability in a circular economy context.
- The influences that drive the integration of the CE principles with sustainability accounting and reporting.
- Potential connections between the Anthropocene and accounting applied to the CE model.
- Accounting processes modified by introducing the CE-related practices in companies to close the material loops.
- Specific capabilities related to environmental accounting to integrate CE principles.
- Internal measurement of the level of introduction of CE in businesses.

- Implications of adopting circular models for sustainability accounting and reporting in companies.
- Relationship between the scope of closing the material loops in companies and the introduction of environmental management accounting practices.
- CSR and accountability of companies related to their level of closing the material loops.
- Implications of the CE postulates in the management and accounting of productive resources (including energy, materials, water, etc.) and products or services and waste.
- Analysis and proposals on business financial and non-financial information about CE-related practices.
- Management accounting for CE: management tools, scorecard indicators, Balanced Scorecard for CE, etc.
- Accounting for CE issues in key product value chains proposed by the new circular economy action plan of UE (2020): Electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings; and food, water and nutrients.
- Costing, assessment and evaluation of the performance of CE actions.
- Accounting and management for reducing waste in key industries and key value chains.

This Special Issue of **Sustainability accounting, accountability and disclosure in a Circular Economy** is in collaboration with the EMAN Europe 2022 Congress to be held in San Sebastian on 15-17 of June 2022. Of course, submissions to this Special Issue may be made directly without submitting to the conference.

### **Time schedule**

The following schedule is planned:

Submission of papers: 31/12/2022

Initial decisions made and authors informed: 31/1/ 2023

Deadline for last paper revisions for consideration in the special issue: May of 2023

Publication of special edition of journal: summer 2023

### **Contributions**

Full papers are invited to be considered for publication in the journal special issue, for theoretical papers and empirical studies and should follow the author guidelines.

Submitted papers should make clear their relevance to accounting for sustainability, sustainability management, circular economy, management practice, and academic significance. We also welcome joint papers by academics and practitioners.

### **Submission Instructions**

Submission deadline: 31/12/2022, <https://revistas.um.es/rccsar>, (JCR Impact Factor 2020 in Business, Finance: 2.324,)

Authors should refer to the Author Guidelines for instructions on submitting to the [Revista de Contabilidad-Spanish Accounting Review](#).

Submissions should be made via: journal web pages:  
<https://revistas.um.es/rcsar/about/submissions>

You have to send two files:

#### **First File:**

Title in English and Spanish (not required for non-Spanish speakers).

Authors (name and surname) and include their details (postal address, institution, country, telephone, e-mail address). Among these data it is very important that the ORCID number of each of the authors appears.

Name a corresponding author.

Clearly indicate that the submission is related to EMAN EUROPE 2022, to be included in the special process of the special issue.

#### **Manuscript File:**

Title in English and Spanish (not required for non-Spanish speakers).

Abstract (in English and Spanish (not required for non-Spanish speakers)).

List of keywords.

JEL classification codes.

All figures and their corresponding titles.

All tables (with title, description and relevant notes).

All references to tables and figures in the text match the table and figure files you submit.

#### **References**

- Aranda-Usón, A., M. Moneva, J., Portillo-Tarragona, P., & Llena-Macarulla, F. (2018). Measurement of the circular economy in businesses: Impact and implications for regional policies. *Economics and Policy of Energy and the Environment*, 2(1), 187–205. <https://doi.org/10.3280/EFE2018-002010>
- Aranda-Usón, A., Portillo-Tarragona, P., Scarpellini, S., & Llena-Macarulla, F. (2020). The progressive adoption of a circular economy by businesses for cleaner production: An approach from a regional study in Spain *Journal of Cleaner Production*, 247, 119648. <https://doi.org/10.1016/j.jclepro.2019.119648>.
- Van Berkel, R. (2010). Quantifying sustainability benefits of industrial symbioses. *Journal of Industrial Ecology*, 14(3), 371–373. <https://doi.org/10.1111/j.1530-9290.2010.00252.x>
- Bocken, N.M.P., de Pauw, I., Bakker, C., & van der Grinten, B. (2016). Product design and business model strategies for a circular economy. *Journal of Industrial and Production Engineering*, 33(5), 308–320. <https://doi.org/10.1080/21681015.2016.1172124>
- Elkington, J. (2004). .Enter the Triple Bottom Line. In A. Henriques & J. Richardson (Eds), *The triple bottom line, does it all add up? : assessing the sustainability of business and CSR* (pp. 1-16), London, UK: Routledge.
- Ellen MacArthur Foundation. (2015a). Towards a Circular Economy - Economic and Business Rationale for an Accelerated Transition. Available at: <https://www.ellenmacarthurfoundation.org/publications/towards-a-circular-economy-business-rationale-for-an-accelerated-transition> (accessed 15 December

- 2020).
- Ellen MacArthur Foundation (2015b). *Delivering the Circular Economy: A Toolkit for Policymakers, Delivering the Circular Economy: A Toolkit for Policymakers*. Available at <https://icmfalkfoundation.org/delivering-the-circular-economy-a-toolkit-for-policymakers/>.
- European Commission. (2015). An EU action plan for the circular economy, COM(2015) 614 final..
- European Commission (2020). The New Circular Economy Action Plan. COM(2020) 98 final. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>.
- Geissdoerfer, M., Savaget, P., Bocken, N.M.P., & Hultink, E.J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, 143, 757–768. <https://doi.org/10.1016/j.jclepro.2016.12.048>
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>
- Girard, L.F., & Nocca, F. (2019). Moving towards the circular economy/city model: Which tools for operationalizing this model?. *Sustainability*, 11(22), 6253. <https://doi.org/10.3390/su11226253>
- Hysa, E., Kruja, A., Rehman, N.U., & Laurenti, R. (2020). Circular Economy Innovation and Environmental Sustainability Impact on Economic Growth: An Integrated Model for Sustainable Development. *Sustainability*, 12(12), 4831. <https://doi.org/10.3390/su12124831>
- Iacovidou, E., Velis, C.A., Purnell, P., Zwirner, O., Brown, A., Hahladakis, J., Millward-Hopkins, J., & Willians, P.T. (2017). Metrics for optimising the multi-dimensional value of resources recovered from waste in a circular economy: A critical review. *Journal of Cleaner Production*, 166, 910-938. <https://doi.org/10.1016/j.jclepro.2017.07.100>.
- Jun, H., & Xiang, H. (2011). Development of circular economy is a fundamental way to achieve agriculture sustainable development in China. *Energy Procedia*, 5, 1530–1534. <https://doi.org/10.1016/j.egypro.2011.03.262>
- Kirchherr, J., Reike, D. & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, 127, 221–232. <https://doi.org/10.1016/j.resconrec.2017.09.005>
- Kravchenko, M., Pigosso, D.C., & McAlone, T.C. (2019). Towards the ex-ante sustainability screening of circular economy initiatives in manufacturing companies: Consolidation of leading sustainability-related performance indicators. *Journal of Cleaner Production*, 241, 118318. <https://doi.org/10.1016/j.jclepro.2019.118318>
- Larrinaga, C., & Garcia-Torea, N. (2022). An ecological critique of accounting: The circular economy and COVID-19. *Critical Perspectives on Accounting*, 82, 102320. <https://doi.org/10.1016/j.cpa.2021.102320>
- Llena-Macarulla, F., Moneva, J.M., Aranda-Usón, A., & Scarpellini, S. (2023). Reporting measurements or measuring for reporting? Internal measurement of the Circular Economy from an environmental accounting approach and its relationship. *Revista de Contabilidad-Spanish Accounting Review*, IN PRESS.
- Marco-Fondevila, M., Llena-Macarulla, F., Callao-Gastón, S., & Jarne-Jarne, J.I. (2021). Are circular economy policies actually reaching organizations? Evidence from the largest Spanish companies. *Journal of Cleaner Production*, 285, 124858. <https://doi.org/10.1016/j.jclepro.2020.124858>

- Mathews, J.A., & Tan, H. (2011). Progress Toward a Circular Economy in China. *Journal of Industrial Ecology*, 15(3), 435–457. <https://doi.org/10.1111/j.1530-9290.2011.00332.x>
- Murray, A., Skene, K., & Haynes, K. (2015). The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. *Journal of Business Ethics*, 140(3), 369–380. <https://doi.org/10.1007/s10551-015-2693-2>
- Pesci, C., Costa, E., & Andraus, M. (2020). Using accountability to shape the common good. *Critical Perspectives on Accounting*, 67–68, 102079. <https://doi.org/10.1016/j.cpa.2019.03.001>
- Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review. *Journal of Cleaner Production*, 276, 124033. <https://doi.org/10.1016/j.jclepro.2020.124033>
- Scarpellini, S. (2021). Social impacts of a circular business model: An approach from a sustainability accounting and reporting perspective. *Corporate Social Responsibility and Environmental Management*, Early view. <https://doi.org/10.1002/csr.2226>
- Scarpellini, S., Marín-Vinuesa, L.M., Aranda-Usón, A., & Portillo-Tarragona, P. (2020). Dynamic capabilities and environmental accounting for the circular economy in businesses”, *Sustainability Accounting, Management and Policy Journal*, 11(7), 1129–1158. <https://doi.org/10.1108/SAMPJ-04-2019-0150>
- Scarpellini, S., Portillo-Tarragona, P., Aranda-Usón, A., & Llena-Macarulla, F. (2019). Definition and measurement of the circular economy’s regional impact. *Journal of Environmental Planning and Management*, 62(13), 2211–2237. <https://doi.org/10.1080/09640568.2018.1537974>
- 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*, Early view. <https://doi.org/10.1111/ijmr.12288>
- Yin, K., Wang, R., Zhou, C., & Liang, J. (2012). Review of eco-efficiency accounting method and its applications. *Acta Ecologica Sinica*, 11, 3595–3605.
- Yuan, Z., Bi, J., & Moriguchi, Y. (2008). The Circular Economy: A New Development Strategy in China. *Journal of Industrial Ecology*, 10(1–2), 4–8. <https://doi.org/10.1162/108819806775545321>