

HEIs, Latin America Circular Economy

Subjects: Others | Engineering, Environmental | Green & Sustainable Science & Technology

Contributor: Angel D. Ramirez

HEIs (Higher Education Institutions) are main actors in the economic development and innovative potential of regions, but now and an increasing number of additional roles are expected. HEIs, as institutional actors, are enablers of social, economic, and cultural development, and sustainability. HEIs can foster collaboration between actors and catalyze public awareness and engagement in CE practices.

Keywords: circular economy ; Latin America ; higher education institutions ; industrial ecology ; developing countries ; bibliometric analysis ; systematic review

1. Introduction

The Circular economy (CE) arises as a concept that may support sustainable development at various levels (industrial/manufacturing, business, consumption, and social) ^{[1][2][3][4][5][6][7][8][9][10][11][12]} and is in line with other sustainability strategies, which contributed to its meaning ^{[13][9][11][12][14][15]}, and has gained great momentum during the last years ^{[3][4][7][16][17]}.

The research in the concept is intense, and it is derived mostly from experiences in developed countries from the Global North. Due to their industrialization, these countries have passed take-back laws that aim to reduce the toxicity of materials, increase the availability of recyclable materials and prevent pollution ^[18]. As a result, the CE concept has been considered to promote efficient production and sustainable consumption ^[19]. In fact, CE has already influenced policies in large global economies, such as China, Japan, the United Kingdom, and the European Union ^{[15][16]}. However, while ambitious and committed efforts towards CE were reported in these regions, the path that emerging economies are taking has not yet been properly researched ^[20]. For countries that rely on different activities such as agriculture, fossil fuel, and mineral extraction, specifically Latin American countries (LA countries), CE requires a different roadmap. The COVID-19 pandemic in Latin America revealed significant shortcomings in the linear economy; the vulnerability of global value chains, the depletion of natural resources, and the exacerbation of social inequalities. The CE shows great potential if inclusive development is promoted in these regions ^{[21][21]}. The coordination and engagement of multiple stakeholders are relevant for a CE transition. However, CE is not only a “technological and business-oriented issue, social and institutional contexts matter” ^[22]. Achieving circular economic development in Latin American countries requires transparent, robust, and accountable institutions. It was proven that institutions have a strong bearing on the capacity of governments in Latin America to achieve economic development ^[23].

Higher education institutions (HEIs) represent the type of institution in LA countries which has an essential roles not only for research but also for the unity of different actors such as government, industry, and civil society ^[24]. The intellectual capital is the value of intangible assets of HEIs, such as scholars’ knowledge and expertise, and it is relevant for any effort towards CE ^{[25][26]}. HEIs are considered main actors which aid all relevant efforts towards sustainable development ^{[8][27][28][29]}. Additionally, they are expected to play an essential role in the global sustainability agenda of these decades ^{[30][31]}. The engagement of HEIs in developing countries poses unique challenges ^{[32][33]}, as HEIs are able to address regional and cultural differences when importing sustainability solutions from developed regions ^[34] and have a unique opportunity to harness the benefits of local circular practices, which are commonly performed in Latin American countries by people out of necessity ^[18]. While defining the role of HEIs regarding CE, there should be caution with “one-size-fits-all” approaches, and there may already be some degree of embeddedness of HEIs in local social issues, which should be understood as well ^[35].

The role of other stakeholders was already addressed by reviewing the literature. There are CE reviews about policies ^{[17][36]}, business models ^[37], industry ^[38], and supply chain ^[39]. However, there is a lack of research on the role of HEIs in the pursuit for a CE in Latin American countries, even though these are main stakeholders for CE. Thus, a route for HEIs’ involvement in CE does not exist in the region. The present study addresses this gap by providing an analysis of literature under a bibliometric systematic and narrative approach. This research aims to define the role of HEIs for the transition to

CE in Latin American countries and poses an opportunity to contribute to the CE body of knowledge from a Latin American , Global South perspective by answering the following main research question: what is the role of HEIs in the transition to a CE in Latin American countries?

2. Activities Related to Circular Economy Keywords Involving HEIs in Latin American Countries

Figure 1 provides insights from the results of Search 1 [40][41][42][43][44][45][46][47][48][49][50][51][52][53][54][55][56][57][58][59][60][61][62][63][64][65][66][67][68][69][70][71][72][73][74][75][76][77][78][79][80][81][82][83][84][85][86][87][88][89][90][91]. **Figure 1** presents the number of articles by CE keyword, year, country, journal, and affiliation. This information allows scholars to understand how activities, considered “circular” to some degree, were addressed without considering the current CE concept. **Figure 1a** shows the CE keywords and the number of articles with topics related to each keyword. Those with more results are associated mainly with waste management (recycling, collection, and reuse) and energy (renewable and biogas). The number of articles on related CE activities has increased in the last years; 77% were published after 2015, and 30% only in 2020, as shown in **Figure 1b**. This shows the increasing trend in topics related to CE in LA countries where HEIs are involved. It is important to note that most of these studies do not address the CE concept as understood in this article but address topics related to CE keywords.

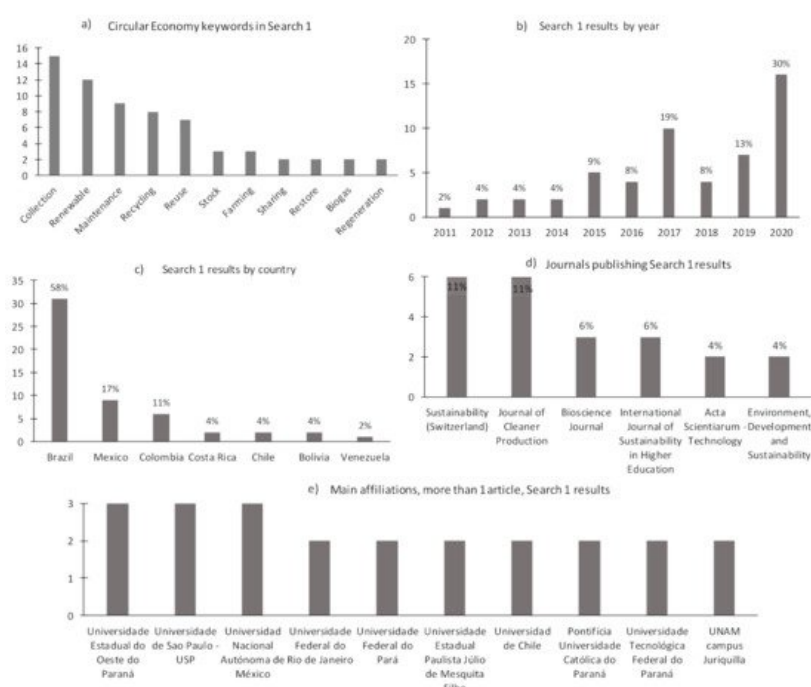


Figure 1. Results for Search 1.

Brazil is the main contributor to Search 1 results (58%), followed by Mexico (17%) and Colombia (6%). These three countries sum up 87% of the articles (**Figure 1c**).

Sustainability (Switzerland) and *Journal of Cleaner Production* are the journals with most articles, each with 11% of the articles (**Figure 1d**), and Brazilian universities are the main contributors, as expected given the fact that Brazil is the country which contributed with more than half of the articles. A Chilean and a Mexican university count more than one publication each (**Figure 1e**).

Figure 2 shows the author keywords co-occurrences (minimum three occurrences) for selected articles of Search 1 (53 articles). The most occurring author keywords are: “sustainable development”, “sustainability”, “Brazil”, “recycling”, and “waste management.” Other keywords with high occurrence are related to water and energy: “wastewater”, and “renewable energy.” This figure identifies that the most researched topics in these articles are related to waste management and energy efficiency and that the HEIs involved are mainly from Brazil.

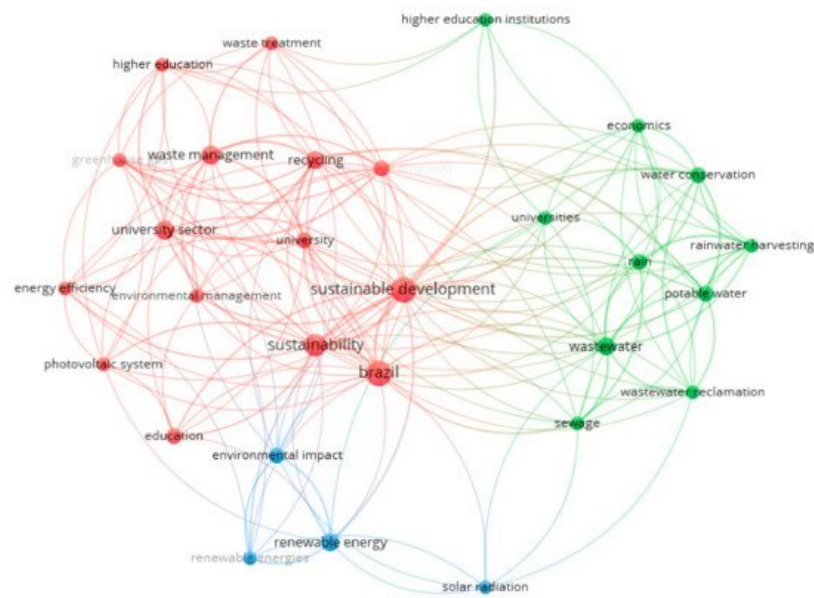


Figure 2. Author keywords co-occurrence for Search 1 results. Minimum three occurrences.

3. Circular Economy Research in Latin American Countries and the Extent of Higher Education Institutions' Involvement

The following articles were selected from Search 2: [20][21][39][92][93][94][95][96][97][98][99][100][101][102][103][104][105][106][107][108][109][110][111][112][113][114][115][116][117][118][119][120][121][122][123][124][125][126][127][128][129][130][131][132][133][134][135][136][137][138][139][140][141][142][143][144][145][146][147][148][149][150][151][152][153][154][155][156][157][158][159][160][161][162][163][164][165][166][167][168][169][170][171][172][173][174][175][176][177][178]. **Figure 3** presents insights into this set of results, including articles by year, country, journal, affiliations, and authors, and also presents which of these articles were related to HEIs. These articles refer to the current CE concept. **Figure 3a** shows the distribution per year. No articles were found before 2016. Publications in the last two years (2019 and 2020) count for almost 80% of the results, while articles from 2020 represent half of them. This shows how novel the CE research is in the region is, and how publications show a growing trend. However, from 90 articles, only four (4%) involved case studies related to HEI campuses, food waste-to-energy [99], waste management strategies [150], collection of recyclable waste [124], and community engagement [139].

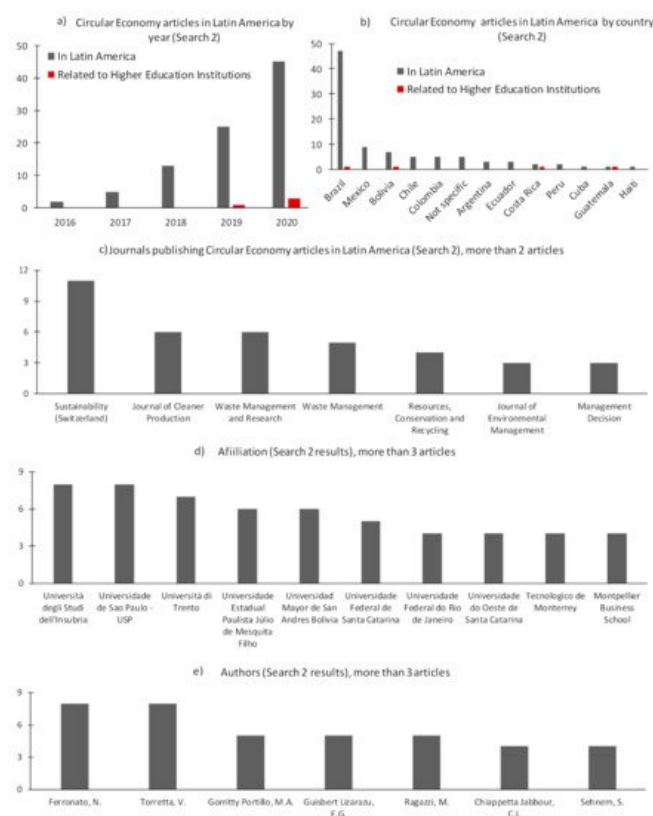


Figure 3. Results for Search 2.

Half of the results (52%) in Search 2 are from Brazil, as **Figure 3b** shows, which is remarkable compared with the second country on the list, Mexico, with approximately 10% of the publications. These are followed by Bolivia (8%), where the

authors with more publications (See **Figure 3e**) have been working with topics related to waste management [125][126][129][145]. Brazil, Mexico, Bolivia, Chile, and Colombia sum up 80% of the results.

The journals with more publications are *Sustainability* (Switzerland) (12%), *Journal of Cleaner Production* (7%), *Waste Management and Research* (7%), and *Waste Management* (6%). The rest counted for 4% or less of the results (**Figure 3c**).

Figure 3d shows the affiliations with more than three articles, and **Figure 3e** shows the authors with more than three articles. Most occurring affiliations include Italian HEIs, which correspond to the top two most occurring authors. The most occurring authors hold co-authorship in some articles [123][125][126][127][129][164]. Most top affiliations are Brazilian HEIs, but there is also a Bolivian and a Mexican HEI.

Figure 4 shows the author keyword co-occurrence (keywords occurring at least four times) from Search 2 results. “circular economy” is the most occurring keyword, as these articles directly address the current CE concept. Besides that, the most occurring keywords are: “sustainable development”, “waste management”, “recycling”, “Brazil”, “sustainability”, “human”, and “municipal solid waste”. This evidences that approaches related to waste management are at the core of CE research in LA countries and that Brazil is the main contributor.

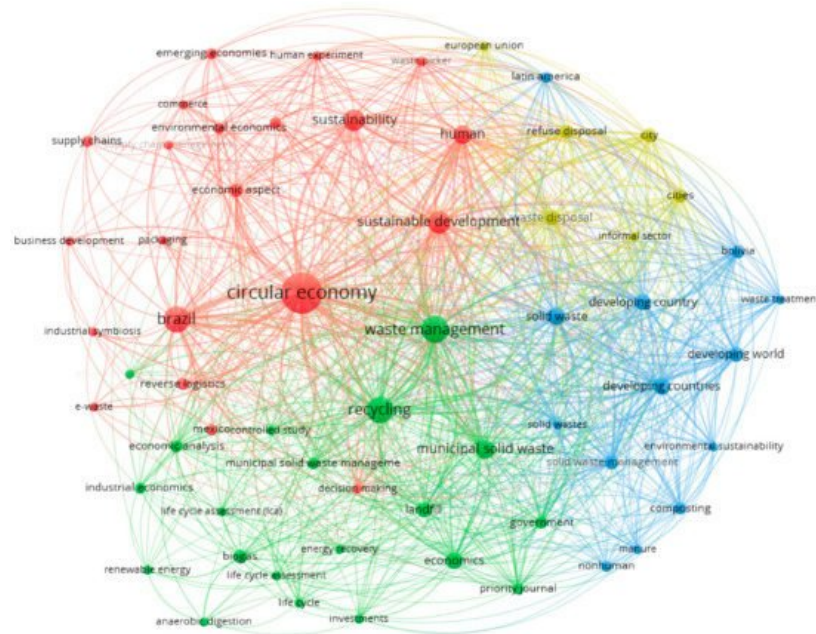


Figure 4. Author keywords co-occurrence in Search 2. Minimum 4 occurrences.

4.6. Circular Economy and Higher Education Institutions

International commitments, such as the 2030 Agenda and the Sustainable Development Goals, exert pressure to improve the engagement level of HEIs in some areas of sustainability action (energy efficiency and renewable energy), which may be related to CE [179]. The importance of HEIs for sustainability challenges has been highlighted by national and international frameworks [180].

Over the last two decades, the interest in higher education for sustainable development has increased among scholars [30]. HEIs are main actors in the economic development and innovative potential of regions, but now and an increasing number of additional roles are expected [181][182][183]. HEIs, as institutional actors, are enablers of social, economic, and cultural development [33][34][182][184][185][186][187][188], and sustainability [180][189][190][191]. HEIs can foster collaboration between actors and catalyze public awareness and engagement in CE practices [192]. A main contribution of HEIs is the generation of human capital, which understands the need to pursue sustainable development and is very important to drive the implementation of CE [10][107][193]. It was shown that the intellectual capital of HEIs influences directly and positively in such initiatives [26][27]. The role of HEIs in developing countries should be addressed adequately given the specific context where it operates [184]. It is clear that all HEIs are now expected to engage actively in national and regional development, both in developed and developing countries; however, the way that HEIs should engage should be agreed [33].

The role of HEIs has evolved. Now sustainable development and outreach (“third mission” contributing to socio-economic development) compromises are expected by society (stakeholders, civil society, governments, and industry) [32][35][194].

HEIs may promote action towards sustainability by internal operative and cultural changes and by their triple function: teaching, researching, and community engagement ^{[9][28]}. Regional HEIs can engage closely with local communities, providing the region with a self-developing capacity, thus obtaining mutually beneficial outcomes ^[29]. HEIs outreach can be addressed by building collaboration channels with local actors (communities, planners, government bodies, NGOs) and fostering student participation in engagement and professional projects ^[31]. Thus, HEIs can tackle circular behaviors already established in the local communities (which may be disregarded by current CE theory), gather them as a local knowledge body, and merge them with outside knowledge on CE business models. HEIs have a unique opportunity to harness the benefits of the local circular practices commonly performed in developing countries by people out of necessity, not by choice ^[18].

There are various ways in which HEIs relate to regional development, which depend on the characteristics of the region ^[188]. If the role of HEIs regarding CE in Latin American countries is to be defined, simultaneously occurring challenges should be acknowledged, such as massification, globalization, marketization, digitalization ^[28], and now even adaptation to the COVID Pandemic, ^[195]. To cope with these increasingly complex demands, HEIs should be integrative and networked (University 4.0) ^[28].

4. Addressing the Role of Higher Education Institutions for the Transition to a Circular Economy in Latin American Countries

Table 1 sums the factors that aid in defining the role of HEIs for the transition to a CE in Latin American countries. The way HEIs engage in developed regions may not be suitable to less developed regions, given poorer infrastructure and technology conditions ^[196], different cultural traits, and institutional constraints, which may hinder the catalytic role of HEIs in developing countries ^[33]. There are different types of HEIs (research, entrepreneurial, and engaged), and thus different roles and engagement modes for each type ^[182]. In the least developed regions, research-oriented HEIs may be the only link to the global scientific knowledge network, playing a central role in fostering development in such areas ^[184]. These institutions allow knowledge and technology transfer from the Global North, where CE is gaining great momentum ^[197].

Developing countries face some unique challenges and require some unique elements regarding HEIs, especially research-oriented ones (when compared with developed countries): creation and retention of a scientific community, research relevance to society and industry, cultural and social development and critique, formation of a new generation of scholars and technicians, research in national languages ^[184].

Furthermore, practical efforts of HEIs do not occur in isolation but require the engagement of other actors and stakeholders and benefit from participating in formal and informal networks ^{[29][187][197]}. There must exist an absorptive capacity in the region to incorporate novel knowledge into society ^[33].

CE implementation requires both top-down and bottom-up approaches ^[15]. However, initiatives on campus may go beyond. Brinkhurst et al. ^[198] suggested considering “faculty and staff” as the “institutional middle”, whose leadership roles are critically important to change behaviors towards sustainability.

Table 1. Factors that aid to define the role of higher education institutions for circular economy in Latin American countries.

Factors Which Aid to Define the Role of HEIs for the Implementation of CE in Latin American Countries	Implications for the Role of HEIs
<p>Factors relating to the rest of CE stakeholders in developing countries:</p> <ul style="list-style-type: none"> - The distrust of governments ^[199], which are drivers for CE in the Global North and in China ^{[17][200]}; - The characteristic barriers in developing countries for innovation activities perceived by firms ^[201]; - The lack, or low reports, of non-governmental organizations promoting CE in Latin American ^[98]; - The lack of inclusion of informal practitioners of circular activities already existent in Latin American countries in CE discourse ^{[20][145][202]}; - Less environmental literacy on the consumer side (citizens) ^{[203][204][205]}; - Actors demonstrate a lack of awareness of the benefits of CE solutions ^[94]. - The inclusion of small producers in CE discourse and practice should be promoted ^[206]; - The lack of suitability between CE solutions and the context ^[207]; - Actors with differing stances on CE ^[11]; - The lack of articulation among actors ^[92]. 	<p>HEIs:</p> <ul style="list-style-type: none"> - Are expected to become cultural change agents for sustainable development, and their role may be greater than the rest of stakeholders in this endeavor ^[27]; - Are main promoters of innovation in developing regions ^[208]; - Can aid decisionmakers and governments in defining the CE policy and agenda; - Should contribute to the environmental literacy of members (staff, students, faculty), citizens; - Can reach informal practitioners of circular activities and small producers through community engagement and outreach activities; - May mediate between actors with differing attitudes towards CE. This role should be studied. - Given the eroded perception of government and institutions, and the characteristic barriers that firms face for innovating for CE in Latin American countries, HEIs may become the main drivers for the transition to CE in these regions, among other stakeholders. However, this role has been just marginally explored in recent literature on CE.
<p>Factors related to characteristics of Latin American countries:</p> <ul style="list-style-type: none"> - Lack of enabling social, institutional, and political conditions ^{[33][207]}; - High corruption rates ^{[207][209]}; - Informal circular activities already occurring out of necessity, and contributing importantly to sustainability. Actors related to these activities are usually part of vulnerable populations ^{[18][21][100][127][136]}; - High dependence on resource extraction ^[18]; - Different worldviews ^[210]; - Different ways of HEIs engagement ^[184]; - Consumer behavior with low environmental literacy ^[207]; - Lack of technological infrastructure ^[207]. 	<p>HEIs:</p> <ul style="list-style-type: none"> - May not address political problems and corruption rates, as it does not fit the expected HEIs mission. - Can harness the already existing knowledge, and know-how of informal organizations performing circular activities and merge it with state-of-the-art outcomes from developed regions ^[18], thus delivering an inclusive CE agenda; - Can promote innovation regarding the dependence on resource extraction; - Can engage (for CE) in different ways, depending on the context, thus reflecting different worldviews accordingly.

Factors Which Aid to Define the Role of HEIs for the Implementation of CE in Latin American Countries	Implications for the Role of HEIs
<p>Factors related to the barriers to innovation in developing countries:</p> <ul style="list-style-type: none"> - Knowledge barriers ^[211]; - Lack of training opportunities ^[100]; - Lack of circularity in HEIs curricula ^[10]. 	<p>HEIs:</p> <ul style="list-style-type: none"> - Can address these barriers directly by its teaching, research and outreach functions ^{[10][212][181][213]}; - Generate human capital ^{[6][196]} which allows society to address CE transition according to the context; - Generate external impacts from the individual's education, technology and productivity spillovers ^[214].
<p>Factors related to circularity drivers in developing countries:</p> <ul style="list-style-type: none"> - Know-how on circular activities already exist in developing countries (e.g., informal waste sorting) ^{[18][202]}; - Frugal innovation solutions allow for achieving circular products and inclusive energy use ^[101]; - Human capital is very important to handle CE transitions ^[107]. 	<p>HEIs can help to integrate informal sectors in CE; education efforts can be expected from CE scholars and practitioners ^[12].</p>
<p>HEIs expected roles ^[35]:</p> <ul style="list-style-type: none"> - Community engagement ^[191]; - Stakeholders synergies for innovation (HEIs, industry and government) ^[215]; - Local knowledge on circularity which can be harnessed by scholars and included in a CE framework ^[136]; - Collaboration with stakeholders and benefiter ^[216]. 	<p>HEIs:</p> <ul style="list-style-type: none"> - Are enablers of regional development in all aspects ^{[34][186]}; - Outreach requires collaboration channels with the rest of actors and promotes student participation in engagement and professional projects ^[31]; - Should be integrative and networked (University 4.0) ^[28].
<p>CE theoretical gaps and limitations</p> <ul style="list-style-type: none"> - Despite the relevance of decoupling economic growth from environmental degradation for developing countries, it is not clear if it can occur with the implementation of current CE discourses ^[217]. A lack of rigor on the understanding of thermodynamics principles which govern any phenomena occurring in the universe, including any form of economy, entail the risk to indulge in overoptimistic stance towards CE ^{[8][218][219][220][221]}; - Rebound effects of CE have not been thoroughly addressed by scholars ^{[8][222][218]}; - Lack of consensus among stakeholders about CE ^{[223][221]}; - CE discourse can include, or not, a human development component ^{[224][203][2]}; - The paths towards CE that emerging economies may be pursuing are poorly researched ^[20]. 	<p>Research (fostered by HEIs):</p> <ul style="list-style-type: none"> - Can influence CE meaning ^[1], thus acknowledging these gaps and avoiding overoptimistic discourses; - An “optimal circularity”, or upper circularity, can be defined ^[219] from the assessing of local contextual factors; - Rebound effect of CE initiatives should be understood; - The relevance of the social side of CE should be considered; - Theoretical tools may aid in the practice of CE in Latin American countries: - HDI ^[2], SSE ^[224], inclusive economy framework ^[136], circular society framework ^[1].

References

1. Calisto Friant, M.; Vermeulen, W.J.V.; Salomone, R. A Typology of Circular Economy Discourses: Navigating the Diverse Visions of a Contested Paradigm. *Resour. Conserv. Recycl.* 2020, 161, 104917.
2. Schröder, P.; Lemille, A.; Desmond, P. Making the Circular Economy Work for Human Development. *Resour. Conserv. Recycl.* 2020, 156, 104686.
3. Corona, B.; Shen, L.; Reike, D.; Rosales Carreón, J.; Worrell, E. Towards Sustainable Development through the Circular Economy—A Review and Critical Assessment on Current Circularity Metrics. *Resour. Conserv. Recycl.* 2019, 151.
4. Geissdoerfer, M.; Savaget, P.; Bocken, N.M.P.; Hultink, E.J. The Circular Economy – A New Sustainability Paradigm? *J. Clean. Prod.* 2017, 143, 757–768.
5. Homrich, A.S.; Galvão, G.; Abadia, L.G.; Carvalho, M.M. The Circular Economy Umbrella: Trends and Gaps on Integrating Pathways. *J. Clean. Prod.* 2018, 175, 525–543.
6. Kirchherr, J.; Reike, D.; Hekkert, M. Conceptualizing the Circular Economy: An Analysis of 114 Definitions. *Resour. Conserv. Recycl.* 2017, 127, 221–232.
7. Merli, R.; Preziosi, M.; Acampora, A. How Do Scholars Approach the Circular Economy? A Systematic Literature Review. *J. Clean. Prod.* 2018, 178, 703–722.
8. Millar, N.; McLaughlin, E.; Börger, T. The Circular Economy: Swings and Roundabouts? *Ecol. Econ.* 2019, 158, 11–19.
9. Murray, A.; Skene, K.; Haynes, K. The Circular Economy: An Interdisciplinary Exploration of the Concept and Application in a Global Context. *J. Bus. Ethics* 2017, 140, 369–380.
10. Nunes, B.T.; Pollard, S.J.T.; Burgess, P.J.; Ellis, G.; De los Rios, I.C.; Charnley, F. University Contributions to the Circular Economy: Professing the Hidden Curriculum. *Sustainability* 2018, 10, 2719.
11. Prieto-Sandoval, V.; Jaca, C.; Ormazabal, M. Towards a Consensus on the Circular Economy. *J. Clean. Prod.* 2018, 179, 605–615.
12. Reike, D.; Vermeulen, W.J.V.; Witjes, S. The Circular Economy: New or Refurbished as CE 3.0? — Exploring Controversies in the Conceptualization of the Circular Economy through a Focus on History and Resource Value Retention Options. *Resour. Conserv. Recycl.* 2018, 135, 246–264.
13. Borrello, M.; Pascucci, S.; Cembalo, L. Three Propositions to Unify Circular Economy Research: A Review. *Sustainability* 2020, 12, 4069.
14. Schroeder, P.; Anggraeni, K.; Weber, U. The Relevance of Circular Economy Practices to the Sustainable Development Goals. *J. Ind. Ecol.* 2019, 23, 77–95.
15. Winans, K.; Kendall, A.; Deng, H. The History and Current Applications of the Circular Economy Concept. *Renew. Sustain. Energy Rev.* 2017, 68, 825–833.
16. Kirchherr, J.; Piscicelli, L.; Bour, R.; Kostense-Smit, E.; Muller, J.; Huibrechtse-Truijens, A.; Hekkert, M. Barriers to the Circular Economy: Evidence From the European Union (EU). *Ecol. Econ.* 2018, 150, 264–272.
17. McDowall, W.; Geng, Y.; Huang, B.; Barteková, E.; Bleischwitz, R.; Türkeli, S.; Kemp, R.; Doménech, T. Circular Economy Policies in China and Europe. *J. Ind. Ecol.* 2017, 21, 651–661.
18. Preston, F.; Lehne, J. A Wider Circle? The Circular Economy in Developing Countries 2017. Available online: <https://www.chathamhouse.org/2017/12/wider-circle-circular-economy-developing-countries> (accessed on 1 July 2021).
19. European Commission. Closing the Loop—An EU Action Plan for the Circular Economy 2015. Available online: <https://www.eea.europa.eu/policy-documents/com-2015-0614-final> (accessed on 1 July 2021).
20. Calderón Márquez, A.J.; Rutkowski, E.W. Waste Management Drivers towards a Circular Economy in the Global South—The Colombian Case. *Waste Manag.* 2020, 110, 53–65.
21. Becerra, L.; Carenzo, S.; Juarez, P. When Circular Economy Meets Inclusive Development. Insights from Urban Recycling and Rural Water Access in Argentina. *Sustainability* 2020, 12, 9809.
22. Cecchin, A.; Salomone, R.; Deutz, P.; Raggi, A.; Cutaia, L. What Is in a Name? The Rising Star of the Circular Economy as a Resource-Related Concept for Sustainable Development. *Circ. Econ. Sustain.* 2021, 1, 83–97.
23. Grassi, D.; Memoli, V. Political Determinants of State Capacity in Latin America. *World Dev.* 2016, 88, 94–106.
24. Schröder, P.; Albaladejo, M.; Alonso Ribas, P.; MacEwen, M.; Tilkanen, J. Chatham House—International Affairs Think Tank. 17 September 2020. Available online: <https://www.chathamhouse.org/> (accessed on 1 July 2021).
25. Pedro, E.M.; Leitão, J.; Alves, H. Bridging Intellectual Capital, Sustainable Development and Quality of Life in Higher Education Institutions. *Sustainability* 2020, 12, 479.

26. Pedro, E.; Leitão, J.; Alves, H. The Intellectual Capital of Higher Education Institutions: Operationalizing Measurement through a Strategic Prospective Lens. *J. Intellect. Cap.* 2019, 20, 355–381.
27. Dzirnińska, M.; Fijałkowska, J.; Sułkowski, Ł. A Conceptual Model Proposal: Universities as Culture Change Agents for Sustainable Development. *Sustainability* 2020, 12, 4635.
28. Giesenbauer, B.; Müller-Christ, G. University 4.0: Promoting the Transformation of Higher Education Institutions toward Sustainable Development. *Sustainability* 2020, 12, 3371.
29. Karatzoglou, B. An In-Depth Literature Review of the Evolving Roles and Contributions of Universities to Education for Sustainable Development. *J. Clean. Prod.* 2013, 49, 44–53.
30. Hallinger, P.; Chatpinyakoo, C. A Bibliometric Review of Research on Higher Education for Sustainable Development, 1998–2018. *Sustainability* 2019, 11, 2401.
31. Lange Salvia, A.; Londero Brandli, L.; Leal Filho, W.; Gasparetto Rebelatto, B.; Reginatto, G. Energy Sustainability in Teaching and Outreach Initiatives and the Contribution to the 2030 Agenda. *Int. J. Sustain. High. Educ.* 2020, 21, 1607–1624.
32. Kohoutek, J.; Pinheiro, R.; Čábelková, I.; Šmídová, M. Higher Education Institutions in Peripheral Regions: A Literature Review and Framework of Analysis. *High. Educ. Policy* 2017, 30, 405–423.
33. Marques, P.; Morgan, K.; Healy, A.; Vallance, P. Spaces of Novelty: Can Universities Play a Catalytic Role in Less Developed Regions? *Sci. Public Policy* 2019, 46, 763–771.
34. Omwoma, S.; Lalah, J.O.; Kueppers, S.; Wang, Y.; Lenoir, D.; Schramm, K.-W. Technological Tools for Sustainable Development in Developing Countries: The Example of Africa, a Review. *Sustain. Chem. Pharm.* 2017, 6, 67–81.
35. Compagnucci, L.; Spigarelli, F. The Third Mission of the University: A Systematic Literature Review on Potentials and Constraints. *Technol. Forecast. Soc. Chang.* 2020, 161.
36. Milios, L. Advancing to a Circular Economy: Three Essential Ingredients for a Comprehensive Policy Mix. *Sustain. Sci.* 2018, 13, 861–878.
37. Lüdeke-Freund, F.; Gold, S.; Bocken, N.M.P. A Review and Typology of Circular Economy Business Model Patterns. *J. Ind. Ecol.* 2019, 23, 36–61.
38. Lieder, M.; Rashid, A. Towards Circular Economy Implementation: A Comprehensive Review in Context of Manufacturing Industry. *J. Clean. Prod.* 2016, 115, 36–51.
39. Teixeira, A.A.; Moraes, T.E.D.C.; Stefanelli, N.O.; de Oliveira, J.H.C.; Teixeira, T.B.; de Souza Freitas, W.R. Green Supply Chain Management in Latin America: Systematic Literature Review and Future Directions. *Environ. Qual. Manag.* 2020, 30, 47–73.
40. Aguilar-Virgen, Q.; Taboada-González, P.; Baltierra-Trejo, E.; Marquez-Benavides, L. Cutting GHG Emissions at Student Housing in Central Mexico through Solid Waste Management. *Sustainability* 2017, 9, 1415.
41. Akwa, J.V.; Konrad, O.; Kaufmann, G.V.; MacHado, C.A. Evaluation of the Photovoltaic Generation Potential and Real-Time Analysis of the Photovoltaic Panel Operation on a Building Facade in Southern Brazil. *Energy Build.* 2014, 69, 426–433.
42. Albornoz, L.L.; Centurião, T.C.; Giacobbo, A.; Zoppas-Ferreira, J.; Bernardes, A.M. Influence of Rain Events on the Efficiency of a Compact Wastewater Treatment Plant: A Case Study on a University Campus Aiming Water Reuse for Agriculture. *Environ. Sci. Pollut. Res.* 2020, 27, 41350–41360.
43. Araújo, E.F.; Arauco, A.M.S.; Dias, B.A.S.; Lacerda, J.J.J.; Boechat, C.L.; Porto, D.L.; Arauco, L.R.R. Wastewater from Swine Farming in the Growth and Nutrition of *Khaya Senegalensis* (Desr.) A Juss Seedlings. *Biosci. J.* 2019, 35, 1378–1389.
44. Barros, H.M.M.; Gheyi, H.R.; Travassos, K.D.; Dias, N.D.S.; Leite, M.S.; Barros, M.K.L.V.; Chipana-Rivera, R. Sunflower Growth Irrigated with Sewage Effluent under Organic Fertilization. *Biosci. J.* 2019, 35, 1839–1846.
45. Barros, R.M.; Filho, G.L.T.; Moura, J.S.; Pieroni, M.F.; Vieira, F.C.; Lage, L.R.; Mohr, G.S.; Bastos, A.S. Design and Implementation Study of a Permanent Selective Collection Program (PSCP) on a University Campus in Brazil. *Resour. Conserv. Recycl.* 2013, 80, 97–106.
46. Barroso Menezes, P.H.; Martins, H.C.; Oliveira, R.R. The Excellence Baldrige Criteria in the Effectiveness of Higher Education Institutions Management. *Braz. Bus. Rev.* 2018, 15, 47–67.
47. Baruch, Z.; Johnson, E.; Yerena, E. What Deters Plant Colonization in a Tropical Pine Plantation? *Rev. Biol. Trop.* 2016, 64, 461–471.
48. Beuron, T.A.; Madruga, L.R.D.R.G.; Garlet, V.; Avila, L.V.; Guarda, F.G.K.; Terra, C.C.D.F.; Balsan, L.A.G. Contributions of an Environmental Management System for Sustainable Development at a Brazilian University. *Environ. Qual. Mana*

49. Bócoli, F.A.; Marcon, J.A.; Izidoro, M.; Bortolon, P.T.; de OLIVEIRA, S.E.R.; Spalevic, V.; de SOUZA, P.S. Bokashi Use in the Passionfruit (*Passiflora Edulis* L.) Germination and Initial Growth. *Agric. For.* 2020, 66, 101–111.
50. Brandli, L.L.; Marques Prietto, P.D.; Neckel, A. Estimating the Willingness to Pay for Improvement of an Urban Park in Southern Brazil Using the Contingent Valuation Method. *J. Urban Plan. Dev.* 2015, 141.
51. Campos Cardoso, R.N.; Cavalcante Blanco, C.J.; Duarte, J.M. Technical and Financial Feasibility of Rainwater Harvesting Systems in Public Buildings in Amazon, Brazil. *J. Clean. Prod.* 2020, 260.
52. Charli-Joseph, L.; Escalante, A.E.; Eakin, H.; Solares, M.J.; Mazari-Hiriart, M.; Nation, M.; Gómez-Priego, P.; Pérez-Tejada, C.A.D.; Bojórquez-Tapia, L.A. Collaborative Framework for Designing a Sustainability Science Programme: Lessons Learned at the National Autonomous University of Mexico. *Int. J. Sustain. High. Educ.* 2016, 17, 378–403.
53. Chrispim, M.C.; Nolasco, M.A. Greywater Treatment Using a Moving Bed Biofilm Reactor at a University Campus in Brazil. *J. Clean. Prod.* 2017, 142, 290–296.
54. Chrispim, M.C.; Tarpeh, W.A.; Salinas, D.T.P.; Nolasco, M.A. The Sanitation and Urban Agriculture Nexus: Urine Collection and Application as Fertilizer in São Paulo, Brazil. *J. Water Sanit. Hyg. Dev.* 2017, 7, 455–465.
55. Ciotola, R.J.; Lansing, S.; Martin, J.F. Emergy Analysis of Biogas Production and Electricity Generation from Small-Scale Agricultural Digesters. *Ecol. Eng.* 2011, 37, 1681–1691.
56. Colares, G.S.; da Silva, F.P.; de Souza Celente, G.; de Loreto, A.C.; Lutterbeck, C.A.; Machado, Ê.L.; Kist, L.T. Combined System for the Treatment and Reuse of Urban Wastewater: The Efficiency of Anaerobic Reactors þ Hybrid Constructed Wetlands þ Ozonation. *Water Sci. Technol.* 2019, 80, 254–264.
57. Costa, L.B.S.; Pires, C.S.; Dos Anjos, J.S.; Correia, B.E.; De Almeida, E.B., Jr. Floristic Survey of Ornamental Plants Used in Dom Delgado University City at the Universidade Federal Do Maranhão, São Luís, Maranhão State, Brazil. *Ornam. Hortic.* 2017, 23, 451–459.
58. de MORAES, E.R.; de CAMARGO, R.; Lana, R.M.Q.; Madeiros, M.H.; Menezes, F.G.; Giorgenon, E.P. Yield and Biometry of Fertilized Sugar Cane with Organomineral Fertilizer of Sewage Sludge and Biostimulant. *Biosci. J.* 2020, 36, 1564–1576.
59. dos Santos, G.L.; Pereira, M.G.; Delgado, R.C.; Torres, J.L.R.; da Silva Cravo, M.D.; Barreto, A.C.; Magistrali, I.C. Evaluation of Natural Regeneration and Recovery of Environmental Services in a Watershed in the Cerrado-Brazil. *Environ. Dev. Sustain.* 2020, 22, 5571–5583.
60. Drahein, A.D.; De Lima, E.P.; Da Costa, S.E.G. Sustainability Assessment of the Service Operations at Seven Higher Education Institutions in Brazil. *J. Clean. Prod.* 2019, 212, 527–536.
61. Esteves, A.O.; Souza, T.M. Comparison of the Parameters of Thermal Comfort in a House Built with Green Bricks with a Conventional Construction. *Renew. Energy Power Qual. J.* 2015, 1, 135–138.
62. Favorito, A.R.; da Silva Rodrigues, A.P.; de Lourdes Alves Figueiredo, M. Commons of Knowledge in Libraries of Universities in Curitiba (PR), Brazil. *Rev. Digit. Bibl. E Cienc. Inf.* 2020, 18.
63. Ferreira, M.F.; Freitas, M.A.V.; da Silva, N.F.; da Silva, A.F.; da Paz, L.R.L. Insertion of Photovoltaic Solar Systems in Technological Education Institutions in Brazil: Teacher Perceptions Concerning Contributions towards Sustainable Development. *Sustainability* 2020, 12, 1292.
64. Ferronato, N.; D'Avino, C.; Ragazzi, M.; Torretta, V.; De Feo, G. Social Surveys about Solid Waste Management within Higher Education Institutes: A Comparison. *Sustainability* 2017, 9, 391.
65. Galarza-Molina, S.L.; Torres, A.; Moura, P.; Lara-Borrero, J. CRIDE: A Case Study in Multi-Criteria Analysis for Decision-Making Support in Rainwater Harvesting. *Int. J. Inf. Technol. Decis. Mak.* 2015, 14, 43–67.
66. Gervásio, E.S.; Ishikawa, F.H.; da Silva, V.D.; De Melo Junior, J.C.F. Water Levels Depletion in Substrate in the Development of *Heliconia Psittacorum* L. F. CV. Red Opal. *IRRIGA* 2017, 22, 44–58.
67. Gnoatto, E.L.; Kalbusch, A.; Henning, E. Evaluation of the Environmental and Economic Impacts on the Life Cycle of Different Solutions for Toilet Flush Systems. *Sustainability* 2019, 11, 4742.
68. González, V.G.; Hoyos Velasco, F.E.; Candelo-Becerra, J.E. Strategies for Use, Treatment, Management and Final Disposition of Wastes in Academic Laboratories. *Telkomnika Telecommun. Comput. Electron. Control* 2020, 18, 3130–3141.
69. Gottwald, J.; Buch, F.; Giesecke, K. Understanding the Role of Universities in Technology Transfer in the Renewable Energy Sector in Bolivia. *Manag. Environ. Qual.* 2012, 23, 291–299.
70. Grisales-Noreña, L.F.; Ramos-Paja, C.A.; Gonzalez-Montoya, D.; Alcalá, G.; Hernandez-Escobedo, Q. Energy Management in PV Based Microgrids Designed for the Universidad Nacional de Colombia. *Sustainability* 2020, 12, 1219.

71. Hernandez-Escobedo, Q.; Ramirez-Jimenez, A.; Dorador-Gonzalez, J.M.; Perea-Moreno, M.-A.; Perea-Moreno, A.-J. Sustainable Solar Energy in Mexican Universities. Case Study: The National School of Higher Studies Juriquilla (UNAM). *Sustainability* 2020, 12, 3123.
72. Lenz, A.M.; Colle, G.; de Souza, S.N.M.; Prior, M.; Camargo Nogueira, C.E.; dos Santos, R.F.; Friedrish, L.; Secco, D. Evaluation of Three Systems of Solar Thermal Panel Using Low Cost Material, Tested in Brazil. *J. Clean. Prod.* 2017, 167, 201–207.
73. Lenz, A.M.; de Souza, S.N.M.; Nogueira, C.E.C.; Gurgacz, F.; Prior, M.; Pazuch, F.A. Analysis of Absorbed Energy and Efficiency of a Solar Flat Plate Collector. *Acta Sci. Technol.* 2017, 39, 279–284.
74. Lima, E.; Ribeiro, S.K. Monitoring Sustainability at Rio de Janeiro Federal University. *Proc. Inst. Civ. Eng. Munic. Eng.* 2016, 169, 189–198.
75. López Zavala, M.Á.; Vega, R.C.; Miranda, R.A.L. Potential of Rainwater Harvesting and Greywater Reuse for Water Consumption Reduction and Wastewater Minimization. *Water* 2016, 8, 264.
76. Lourenço, A.P.; Santos, A.P.M.; Checon, H.H.; Costa, M.R.; Assis Júnior, S.L. Cavity-Nesting Bee Communities in Areas with Different Levels of Vegetation Disturbance. *Stud. Neotropical Fauna Environ.* 2020, 55, 116–128.
77. Luna, G.; Alejandro, F.; Luna, G.; Andrés, M.; Roa, R.; Yezid, N. Spatial-Temporal Assessment and Mapping of the Air Quality and Noise Pollution in a Sub-Area Local Environment inside the Center of a Latin American Megacity: Universidad Nacional de Colombia - Bogotá Campus. *Asian J. Atmos. Environ.* 2018, 12, 232–243.
78. Mac-Lean, C.; Cabezas, R.; Muñoz, M.; Vargas, L. Applications of Low Enthalpy Geothermal Energy: The Case of the Faculty of Physical and Mathematical Sciences at the University of Chile. *Int. J. Energy Prod. Manag.* 2018, 3, 69–78.
79. Martínez-Orea, Y.; Castillo-Argüero, S.; Hernández-Apolinar, M.; Guadarrama-Chávez, M.P.; Orozco-Segovia, A. Seed Rain after a Fire in a Xerophytic Shrubland. *Rev. Mex. Biodivers.* 2012, 83, 447–457.
80. Michels, R.N.; Canteri, M.G.; e Silva, M.A.A.; Gnoatto, E.; dos Santos, J.A.A.; de Jesus, M.M.A. Yield from Photovoltaic Modules under Real Working Situations in West Paraná - Brazil. *Acta Sci. Technol.* 2015, 37, 19–24.
81. Moura, M.M.C.; Frankenberger, F.; Tortato, U. Sustainability in Brazilian HEI: Practices Overview. *Int. J. Sustain. High. Educ.* 2019, 20, 832–841.
82. Nadaletti, W.C.; Bariccatti, R.A.; Santos, R.F.; Melegari de Souza, S.N.; da Cruz Siqueira, J.A.; Antonelli, J.; Cremonez, P.; Rossi, E.; Mari Junior, A. Response of Canola (*Brassica Napus* L. Var. *Oleifera* Moench.) to the Use of Biofertilizer from Swine Farming at Different Groundwater Levels. *J. Food Agric. Environ.* 2014, 12, 415–417.
83. Pinheiro, C.N.P.; Barbosa, A.R. Analysis of Pathological Manifestations in Buildings at the University City Prof. José Da Silveira Netto, Located in Belém-PA. *Int. J. Innov. Technol. Explor. Eng.* 2019, 8, 1016–1020.
84. Ramírez Lara, E.; De la Rosa, J.R.; Ramírez Castillo, A.I.; Cerino-Córdova, F.D.J.; López Chuken, U.J.; Fernández Delgadillo, S.S.; Rivas-García, P. A Comprehensive Hazardous Waste Management Program in a Chemistry School at a Mexican University. *J. Clean. Prod.* 2017, 142, 1486–1491.
85. Rangel-Martínez, C.; Jiménez-González, D.E.; Martínez-Ocaña, J.; Romero-Valdovinos, M.; Castillo-Rojas, G.; Espinosa-García, A.C.; López-Vidal, Y.; Mazari-Hiriart, M.; Maravilla, P. Identification of Opportunistic Parasites and Helminth Ova in Concentrated Water Samples Using a Hollow-Fibre Ultrafiltration System. *Urban Water J.* 2015, 12, 440–444.
86. Rivera, O.; Mauleudoux, M.; Valencia, A.; Jimenez, R.; Avilés, O. Hardware in Loop of a Generalized Predictive Controller for a Micro Grid DC System of Renewable Energy Sources. *Int. J. Eng. Trans. B Appl.* 2018, 31, 1215–1221.
87. Rodríguez-Rodríguez, J.A.; Vargas-Villalobos, F.; Aparicio-Mora, F.; Nova-Bustos, F.; Pinnock-Branford, F. Physical, Chemical, and Biological Treatment of Chemical Waste from Teaching Laboratories at Universidad Nacional, Costa Rica. *Uniciencia* 2020, 34, 82–94.
88. Rojas, M.; Mac-Lean, C.; Morales, J.; Monares, A.; Fustos, R. Climate Change Education and Literacy at the Faculty of Physical and Mathematical Sciences of the University of Chile. *Int. J. Glob. Warm.* 2017, 12, 347–365.
89. Ruiz Morales, M. Context and Evolution of the Integrated Solid Waste Management Program at Universidad Iberoamericana Mexico City. *Rev. Int. Contam. Ambient.* 2017, 33, 337–346.
90. Torres, M.N.; Fontecha, J.E.; Zhu, Z.; Walteros, J.L.; Rodríguez, J.P. A Participatory Approach Based on Stochastic Optimization for the Spatial Allocation of Sustainable Urban Drainage Systems for Rainwater Harvesting. *Environ. Model. Softw.* 2020, 123.
91. Velazquez, L.; Munguia, N.; Ojeda, M. Optimizing Water Use in the University of Sonora, Mexico. *J. Clean. Prod.* 2013, 46, 83–88.
92. Cezarino, L.O.; Liboni, L.B.; Oliveira Stefanelli, N.; Oliveira, B.G.; Stocco, L.C. Diving into Emerging Economies Bottleneck: Industry 4.0 and Implications for Circular Economy. *Manag. Decis.* 2019.

93. Abuabara, L.; Paucar-Caceres, A.; Burrowes-Cromwell, T. Consumers' Values and Behaviour in the Brazilian Coffee-in-Capsules Market: Promoting Circular Economy. *Int. J. Prod. Res.* 2019, 57, 7269–7288.
94. Aguiñaga, E.; Henriques, I.; Scheel, C.; Scheel, A. Building Resilience: A Self-Sustainable Community Approach to the Triple Bottom Line. *J. Clean. Prod.* 2018, 173, 186–196.
95. Alvarez-Risco, A.; Rose, M.A.; Del-Aguila-Arcentales, S. A New Regulation for Supporting a Circular Economy in the Plastic Industry: The Case of Peru (Short Communication). *J. Landsc. Ecol. Repub.* 2020, 13, 1–3.
96. Banguera, L.A.; Sepúlveda, J.M.; Ternero, R.; Vargas, M.; Vásquez, Ó.C. Reverse Logistics Network Design under Extended Producer Responsibility: The Case of out-of-Use Tires in the Gran Santiago City of Chile. *Int. J. Prod. Econ.* 2018, 205, 193–200.
97. Batista, L.; Gong, Y.; Pereira, S.; Jia, F.; Bittar, A. Circular Supply Chains in Emerging Economies—a Comparative Study of Packaging Recovery Ecosystems in China and Brazil. *Int. J. Prod. Res.* 2019, 57, 7248–7268.
98. Betancourt Morales, C.M.; Zartha Sossa, J.W. Circular Economy in Latin America: A Systematic Literature Review. *Bus. Strategy Environ.* 2020, 29, 2479–2497.
99. Brenes-Peralta, L.; Jiménez-Morales, M.F.; Campos-Rodríguez, R.; De Menna, F.; Vittuari, M. Decision-Making Processes in the Circular Economy: A Case Study on University Food Waste-to-Energy Actions in Latin America. *Energies* 2020, 13, 2291.
100. Burneo, D.; Cansino, J.M.; Yñiguez, R. Environmental and Socioeconomic Impacts of Urban Waste Recycling as Part of Circular Economy. The Case of Cuenca (Ecuador). *Sustainability* 2020, 12, 3406.
101. Busch, H.-C.; Dauth, T.; Fischer, L.; Souza, M. Frugal Innovation Approaches to Sustainable Domestic Energy: Two Cases of Solar Water Heating from Brazil. *Int. J. Technol. Learn. Innov. Dev.* 2018, 10, 231–257.
102. Camacho-Otero, J.; Pettersen, I.N.; Boks, C. Consumer Engagement in the Circular Economy: Exploring Clothes Swapping in Emerging Economies from a Social Practice Perspective. *Sustain. Dev.* 2020, 28, 279–293.
103. Cardoso de Oliveira, M.C.; Machado, M.C.; Chiappetta Jabbour, C.J.; Lopes de Sousa Jabbour, A.B. Paving the Way for the Circular Economy and More Sustainable Supply Chains: Shedding Light on Formal and Informal Governance Instruments Used to Induce Green Networks. *Manag. Environ. Qual. Int. J.* 2019, 30, 1095–1113.
104. Carneiro, M.; Bilotta, P.; Malucelli, L.C.; Och, S.H.; da Silva Carvalho Filho, M.A. Sludge and Scum Blends from Water and Sewage Treatment Plants for Energy Recovering toward a Circular Economy Perspective. *Int. J. Environ. Sci. Technol.* 2020, 17, 3847–3856.
105. Casiano Flores, C.; Bressers, H.; Gutierrez, C.; de Boer, C. Towards Circular Economy—A Wastewater Treatment Perspective, the Presa Guadalupe Case. *Manag. Res. Rev.* 2018, 41, 554–571.
106. Ceglia, D.; Abreu, M.C.S.D.; Da Silva Filho, J.C.L. Critical Elements for Eco-Retrofitting a Conventional Industrial Park: Social Barriers to Be Overcome. *J. Environ. Manag.* 2017, 187, 375–383.
107. Chiappetta Jabbour, C.J.; De Camargo Fiorini, P.; Wong, C.W.Y.; Jugend, D.; Lopes De Sousa Jabbour, A.B.; Roman Pais Seles, B.M.; Paula Pinheiro, M.A.; Ribeiro da Silva, H.M. First-Mover Firms in the Transition towards the Sharing Economy in Metallic Natural Resource-Intensive Industries: Implications for the Circular Economy and Emerging Industry 4.0 Technologies. *Resour. Policy* 2020, 66.
108. Chiappetta Jabbour, C.J.; Seuring, S.; Lopes de Sousa Jabbour, A.B.; Jugend, D.; De Camargo Fiorini, P.; Latan, H.; Izepi, W.C. Stakeholders, Innovative Business Models for the Circular Economy and Sustainable Performance of Firms in an Emerging Economy Facing Institutional Voids. *J. Environ. Manag.* 2020, 264.
109. Chrispim, M.C.; Scholz, M.; Nolasco, M.A. A Framework for Resource Recovery from Wastewater Treatment Plants in Megacities of Developing Countries. *Environ. Res.* 2020, 188.
110. Collazo, A.A. Land Use Planning, Mobility and Historic Preservation in Aguascalientes City. Are Cultural Sustainability and Circular Economy Possible? *Int. J. Sustain. Dev. Plan.* 2020, 15, 647–654.
111. Contreras, M.D.; Barros, R.S.; Zapata, J.; Chamorro, M.V.; Arrieta, A.A. A Look to the Biogas Generation from Organic Wastes in Colombia. *Int. J. Energy Econ. Policy* 2020, 10, 248–254.
112. Cordova-Pizarro, D.; Aguilar-Barajas, I.; Rodriguez, C.A.; Romero, D. Circular Economy in Mexico's Electronic and Cell Phone Industry: Recent Evidence of Consumer Behavior. *Appl. Sci.* 2020, 10, 7744.
113. Cordova-Pizarro, D.; Aguilar-Barajas, I.; Romero, D.; Rodriguez, C.A. Circular Economy in the Electronic Products Sector: Material Flow Analysis and Economic Impact of Cellphone e-Waste in Mexico. *Sustainability* 2019, 11, 1361.
114. Cornejo-Ortega, J.L.; Dagostino, R.M.C. The Tourism Sector in Puerto Vallarta: An Approximation from the Circular Economy. *Sustainability* 2020, 12, 4442.

115. Cosenza, J.P.; De Andrade, E.M.; De Assunção, G.M. A circular economy as an alternative for Brazil's sustainable growth: Analysis of the national solid waste policy. *Rev. Gestao Ambient. E Sustentabilidade* 2020, 9.
116. da Silva, C.L. Proposal of a Dynamic Model to Evaluate Public Policies for the Circular Economy: Scenarios Applied to the Municipality of Curitiba. *Waste Manag.* 2018, 78, 456–466.
117. de Andrade Junior, M.A.U.; Zanghelini, G.M.; Soares, S.R. Using Life Cycle Assessment to Address Stakeholders' Potential for Improving Municipal Solid Waste Management. *Waste Manag. Res.* 2017, 35, 541–550.
118. de Brito Nogueira, T.B.; da Silva, T.P.M.; de Araújo Luiz, D.; de Andrade, C.J.; de Andrade, L.M.; Ferreira, M.S.L.; Fai, A.E.C. Fruits and Vegetable-Processing Waste: A Case Study in Two Markets at Rio de Janeiro, RJ, Brazil. *Environ. Sci. Pollut. Res.* 2020, 27, 18530–18540.
119. de Oliveira, C.T.; Luna, M.M.M.; Campos, L.M.S. Life Cycle Assessment Research Group (CICLOG) Understanding the Brazilian Expanded Polystyrene Supply Chain and Its Reverse Logistics towards Circular Economy. *J. Clean. Prod.* 2019, 235, 562–573.
120. de Oliveira, F.R.; dos Santos, R.F.; França, S.L.B.; Rangel, L.A.D. Strategies and Challenges for the Circular Economy: A Case Study in Portugal and a Panorama for Brazil. *Braz. Arch. Biol. Technol.* 2020, 63.
121. de Souza, F.F.; Ferreira, M.B.; Saraceni, A.V.; Betim, L.M.; Pereira, T.L.; Petter, R.R.H.; Pagani, R.N.; de Resende, L.M.M.; Pontes, J.; Piekarski, C.M. Temporal Comparative Analysis of Industrial Symbiosis in a Business Network: Opportunities of Circular Economy. *Sustainability* 2020, 12, 1832.
122. Do Amaral, M.C.; Zonatti, W.F.; Da Silva, K.L.; Junior, D.K.; Neto, J.A.; Baruque-Ramos, J. Industrial Textile Recycling and Reuse in Brazil: Case Study and Considerations Concerning the Circular Economy. *Gestao E Prod.* 2018, 25, 431–443.
123. Ferronato, N.; Gorritty Portillo, M.A.; Guisbert Lizarazu, E.G.; Torretta, V.; Bezzi, M.; Ragazzi, M. The Municipal Solid Waste Management of La Paz (Bolivia): Challenges and Opportunities for a Sustainable Development. *Waste Manag. Res.* 2018, 36, 288–299.
124. Ferronato, N.; Guisbert Lizarazu, E.G.; Velasco Tudela, J.M.; Blanco Callisaya, J.K.; Preziosi, G.; Torretta, V. Selective Collection of Recyclable Waste in Universities of Low-Middle Income Countries: Lessons Learned in Bolivia. *Waste Manag.* 2020, 105, 198–210.
125. Ferronato, N.; Pinedo, M.L.N.; Torretta, V. Assessment of Used Baby Diapers Composting in Bolivia. *Sustainability* 2020, 12, 5055.
126. Ferronato, N.; Preziosi, G.; Gorritty Portillo, M.A.; Guisbert Lizarazu, E.G.; Torretta, V. Assessment of Municipal Solid Waste Selective Collection Scenarios with Geographic Information Systems in Bolivia. *Waste Manag.* 2020, 102, 919–931.
127. Ferronato, N.; Rada, E.C.; Gorritty Portillo, M.A.; Cioca, L.I.; Ragazzi, M.; Torretta, V. Introduction of the Circular Economy within Developing Regions: A Comparative Analysis of Advantages and Opportunities for Waste Valorization. *J. Environ. Manage.* 2019, 230, 366–378.
128. Ferronato, N.; Ragazzi, M.; Gorritty Portillo, M.A.; Guisbert Lizarazu, E.G.; Viotti, P.; Torretta, V. How to Improve Recycling Rate in Developing Big Cities: An Integrated Approach for Assessing Municipal Solid Waste Collection and Treatment Scenarios. *Environ. Dev.* 2019, 29, 94–110.
129. Ferronato, N.; Ragazzi, M.; Torrez Elias, M.S.; Gorritty Portillo, M.A.; Guisbert Lizarazu, E.G.; Torretta, V. Application of Healthcare Waste Indicators for Assessing Infectious Waste Management in Bolivia. *Waste Manag. Res.* 2020, 38, 4–18.
130. Fournier, J.M.; Acosta Álvarez, D.; Aenlle, A.A.; Tenza-Abril, A.J.; Ivorra, S. Combining Reclaimed Asphalt Pavement (RAP) and Recycled Concrete Aggregate (RCA) from Cuba to Obtain a Coarse Aggregate Fraction. *Sustainability* 2020, 12, 5356.
131. Gameiro, A.H.; Bonaudo, T.; Tichit, M. Nitrogen, Phosphorus and Potassium Accounts in the Brazilian Livestock Agro-Industrial System. *Reg. Environ. Chang.* 2019, 19, 893–905.
132. Gleason Espíndola, J.A.; Cordova, F.; Casiano Flores, C. The Importance of Urban Rainwater Harvesting in Circular Economy: The Case of Guadalajara City. *Manag. Res. Rev.* 2018, 41, 533–553.
133. González, P.; Riveros, S.; Concha, S.; Casas, Y. Waste-to-Energy Options within a Circular Economy Strategy in a Developing Country: The Case of the Bio Bio Region in Chile. *Int. J. Energy Prod. Manag.* 2018, 3, 144–156.
134. Guarnieri, P.; Cerqueira-Streit, J.A.; Batista, L.C. Reverse Logistics and the Sectoral Agreement of Packaging Industry in Brazil towards a Transition to Circular Economy. *Resour. Conserv. Recycl.* 2020, 153.

135. Gutberlet, J.; Bramryd, T.; Johansson, M. Expansion of the Waste-Based Commodity Frontier: Insights from Sweden and Brazil. *Sustainability* 2020, 12, 2628.
136. Gutberlet, J.; Carenzo, S.; Kain, J.-H.; de Azevedo, A.M.M. Waste Picker Organizations and Their Contribution to the Circular Economy: Two Case Studies from a Global South Perspective. *Resources* 2017, 6, 52.
137. Hoffmann, B.S.; de Simone Morais, J.; Teodoro, P.F. Life Cycle Assessment of Innovative Circular Business Models for Modern Cloth Diapers. *J. Clean. Prod.* 2020, 249.
138. Kiradjieva, J.; Lotero Álvarez, L.; Botero Montoya, L.H. Tourism Economy and Governance. The Case of the Municipality of San Rafael in Colombia. *J. Environ. Manag. Tour.* 2020, 11, 1994–2005.
139. Kumble, P.A. Reflections on Service Learning for a Circular Economy Project in a Guatemalan Neighborhood, Central America. *Sustainability* 2019, 11, 4776.
140. Levänen, J.; Lyytinen, T.; Gatica, S. Modelling the Interplay Between Institutions and Circular Economy Business Models: A Case Study of Battery Recycling in Finland and Chile. *Ecol. Econ.* 2018, 154, 373–382.
141. Machado, M.A.D.; Almeida, S.O.; Bollick, L.C.; Bragagnolo, G. Second-Hand Fashion Market: Consumer Role in Circular Economy. *J. Fash. Mark. Manag.* 2019, 23, 382–395.
142. Medeiros, D.L.; Braghirolli, F.L.; Ramlow, H.; Ferri, G.N.; Kiperstok, A. Environmental Improvement in the Printing Industry: The Case Study of Self-Adhesive Labels. *Environ. Sci. Pollut. Res.* 2019, 26, 13195–13209.
143. Mendoza, L.; Aray-Andrade, M.M.; Bermudez, R.; Amaya, J.; Zhang, L.; Moreira, C. Influence of Volumetric Loading Rate on Aerobic Sewage Treatment for Indigenous Algal Growth. *Water Sci. Technol.* 2019, 80, 1287–1294.
144. Menezes Lima, J.A.; Correa Magalhães Filho, F.J.; Constantino, M.; Formagini, E.L. Techno-Economic and Performance Evaluation of Energy Production by Anaerobic Digestion in Brazil: Bovine, Swine and Poultry Slaughterhouse Effluents. *J. Clean. Prod.* 2020, 277.
145. Miranda, I.T.P.; Fidelis, R.; Fidelis, D.A.S.; Pilatti, L.A.; Picinin, C.T. The Integration of Recycling Cooperatives in the Formal Management of Municipal Solid Waste as a Strategy for the Circular Economy—The Case of Londrina, Brazil. *Sustainability* 2020, 12, 513.
146. Monsiváis-Alonso, R.; Mansouri, S.S.; Román-Martínez, A. Life Cycle Assessment of Intensified Processes towards Circular Economy: Omega-3 Production from Waste Fish Oil. *Chem. Eng. Process. Process Intensif.* 2020, 158.
147. Montoro, S.B.; Lucas, J., Jr.; Santos, D.F.L.; Costa, M.S.S.M. Anaerobic Co-Digestion of Sweet Potato and Dairy Cattle Manure: A Technical and Economic Evaluation for Energy and Biofertilizer Production. *J. Clean. Prod.* 2019, 226, 1082–1091.
148. Moya, B.; Sakrabani, R.; Parker, A. Realizing the Circular Economy for Sanitation: Assessing Enabling Conditions and Barriers to the Commercialization of Human Excreta Derived Fertilizer in Haiti and Kenya. *Sustainability* 2019, 11, 3154.
149. Nova Pinedo, M.L.; Ferronato, N.; Ragazzi, M.; Torretta, V. Vermicomposting Process for Treating Animal Slurry in Latin American Rural Areas. *Waste Manag. Res.* 2019, 37, 611–620.
150. Nolasco, E.; Vieira Duraes, P.H.; Pereira Gonçalves, J.; Oliveira, M.C.; Monteiro de Abreu, L.; Nascimento de Almeida, A. Characterization of Solid Wastes as a Tool to Implement Waste Management Strategies in a University Campus. *Int. J. Sustain. High. Educ.* 2020, 22, 217–236.
151. Nunes, K.R.A.; Mahler, C.F. Comparison of Construction and Demolition Waste Management between Brazil, European Union and USA. *Waste Manag. Res.* 2020, 38, 415–422.
152. Nunes, L.J.R.; Loureiro, L.M.E.F.; Sá, L.C.R.; Silva, H.F.C. Sugarcane Industry Waste Recovery: A Case Study Using Thermochemical Conversion Technologies to Increase Sustainability. *Appl. Sci.* 2020, 10, 6481.
153. Oh, J.; Hettiarachchi, H. Collective Action in Waste Management: A Comparative Study of Recycling and Recovery Initiatives from Brazil, Indonesia, and Nigeria Using the Institutional Analysis and Development Framework. *Recycling* 2020, 5, 4.
154. Oliveira, F.R.D.; França, S.L.B.; Rangel, L.A.D. Challenges and Opportunities in a Circular Economy for a Local Productive Arrangement of Furniture in Brazil. *Resour. Conserv. Recycl.* 2018, 135, 202–209.
155. Ottoni, M.; Dias, P.; Xavier, L.H. A Circular Approach to the E-Waste Valorization through Urban Mining in Rio de Janeiro, Brazil. *J. Clean. Prod.* 2020, 261.
156. Paes, M.X.; de Medeiros, G.A.; Mancini, S.D.; Ribeiro, F.M.; Puppim de Oliveira, J.A. Transition to Circular Economy in Brazil: A Look at the Municipal Solid Waste Management in the State of São Paulo. *Manag. Decis.* 2019.
157. Polzer, V.R.; Pisani, M.A.J.; Persson, K.M. The Importance of Extended Producer Responsibility and the National Policy of Solid Waste in Brazil. *Int. J. Environ. Waste Manag.* 2016, 18, 101–119.

158. Ribeiro, E.M.; Barros, R.M.; Tiago Filho, G.L.; dos Santos, I.F.S.; Sampaio, L.C.; dos Santos, T.V.; da Silva, F.D.G.B.; Silva, A.P.M.; de Freitas, J.V.R. Power Generation Potential in Posture Aviaries in Brazil in the Context of a Circular Economy. *Sustain. Energy Technol. Assess.* 2016, 18, 153–163.
159. Ribeiro Siman, R.; Yamane, L.H.; de Lima Baldam, R.; Pardinho Tackla, J.; de Assis Lessa, S.F.; Mendonça de Britto, P. Governance Tools: Improving the Circular Economy through the Promotion of the Economic Sustainability of Waste Picker Organizations. *Waste Manag.* 2020, 105, 148–169.
160. Sánchez, A.S.; Silva, Y.L.; Kalid, R.A.; Cohim, E.; Torres, E.A. Waste Bio-Refineries for the Cassava Starch Industry: New Trends and Review of Alternatives. *Renew. Sustain. Energy Rev.* 2017, 73, 1265–1275.
161. Sehnem, S. Circular Business Models: Babbling Initial Exploratory. *Environ. Qual. Manag.* 2019, 28, 83–96.
162. Sehnem, S.; Campos, L.M.S.; Julkovski, D.J.; Cazella, C.F. Circular Business Models: Level of Maturity. *Manag. Decis.* 2019, 57, 1043–1066.
163. Sehnem, S.; Chiappetta Jabbour, C.J.; Farias Pereira, S.C.; de Sousa Jabbour, A.B.L. Improving Sustainable Supply Chains Performance through Operational Excellence: Circular Economy Approach. *Resour. Conserv. Recycl.* 2019, 149, 236–248.
164. Sehnem, S.; Ndubisi, N.O.; Preschlak, D.; Bernardy, R.J.; Santos Junior, S. Circular Economy in the Wine Chain Production: Maturity, Challenges, and Lessons from an Emerging Economy Perspective. *Prod. Plan. Control* 2020, 31, 1014–1034.
165. Sellitto, M.A.; Almeida, F.A. Strategies for Value Recovery from Industrial Waste: Case Studies of Six Industries from Brazil. *Benchmarking* 2020, 27, 867–885.
166. Sellitto, M.A.; Murakami, F.K. Industrial Symbiosis: A Case Study Involving a Steelmaking, a Cement Manufacturing, and a Zinc Smelting Plant. *Chem. Eng. Trans.* 2018, 70, 211–216.
167. Silva, F.A.D.; Simioni, F.J.; Hoff, D.N. Diagnosis of Circular Economy in the Forest Sector in Southern Brazil. *Sci. Total Environ.* 2020, 706.
168. Silva, T.H.; Mesquita-Guimarães, J.; Henriques, B.; Silva, F.S.; Fredel, M.C. The Potential Use of Oyster Shell Waste in New Value-Added by-Product. *Resources* 2019, 8, 13.
169. Sosa-Hernández, J.E.; Romero-Castillo, K.D.; Parra-Arroyo, L.; Aguilar-Aguila-Isaías, M.A.; García-Reyes, I.E.; Ahmed, I.; Parra-Saldivar, R.; Bilal, M.; Iqbal, H.M.N. Mexican Microalgae Biodiversity and State-of-the-Art Extraction Strategies to Meet Sustainable Circular Economy Challenges: High-Value Compounds and Their Applied Perspectives. *Mar. Drugs* 2019, 17, 174.
170. Valenzuela, L.M.; Tisi, R.; Helle, L. High Density Architecture as Local Factory of Circular Economy. *Int. J. Sustain. Dev. Plan.* 2018, 13, 985–996.
171. Valenzuela-Levi, N. Factors Influencing Municipal Recycling in the Global South: The Case of Chile. *Resour. Conserv. Recycl.* 2019, 150.
172. Valerio, O.; Muthuraj, R.; Codou, A. Strategies for Polymer to Polymer Recycling from Waste: Current Trends and Opportunities for Improving the Circular Economy of Polymers in South America. *Curr. Opin. Green Sustain. Chem.* 2020, 25.
173. Valverde, J.C.; Arias, D.; Campos, R.; Jiménez, M.F.; Brenes, L. Forest and Agro-Industrial Residues and Bioeconomy: Perception of Use in the Energy Market in Costa Rica. *Energy Ecol. Environ.* 2020.
174. Vega-Quezada, C.; Blanco, M.; Romero, H. Synergies between Agriculture and Bioenergy in Latin American Countries: A Circular Economy Strategy for Bioenergy Production in Ecuador. *New Biotechnol.* 2017, 39, 81–89.
175. Villalba, L. Recent Evolution of the Informal Recycling Sector in Argentina within the 'Popular Economy': Measuring Its Impact through a Case Study in Tandil (Buenos Aires). *Waste Manag. Res.* 2020, 38, 1037–1046.
176. Zied, D.C.; Pardo-Giménez, A.; de Oliveira, G.A.; Carrasco, J.; Zeraik, M.L. Study of Waste Products as Supplements in the Production and Quality of *Pleurotus Ostreatus* Var. *Florida*. *Indian J. Microbiol.* 2019, 59, 328–335.
177. Assías, S.G.; Clavijo, C.; Usma, S.; Delvasto, P. On the Incorporation of Pristine and Pre-Vitrified Alkaline Battery Waste into Non-Structural Clay Bricks. *Waste Biomass Valorization* 2021, 12, 3589–3604.
178. Maldonado-Guzmán, G.; Garza-Reyes, J.A.; Pinzón-Castro, Y. Eco-Innovation and the Circular Economy in the Automotive Industry. *Benchmarking Int. J.* 2020, 28, 621–635.
179. Leal Filho, W.; Salvia, A.L.; Paço, A.; Anholon, R.; Gonçalves Quelhas, O.L.; Rampasso, I.S.; Ng, A.; Balogun, A.-L.; Konde, B.; Brandli, L.L. A Comparative Study of Approaches towards Energy Efficiency and Renewable Energy Use at Higher Education Institutions. *J. Clean. Prod.* 2019, 237, 117728.

180. Leal Filho, W.; Vargas, V.R.; Salvia, A.L.; Brandli, L.L.; Pallant, E.; Klavins, M.; Ray, S.; Moggi, S.; Maruna, M.; Conticelli, E.; et al. The Role of Higher Education Institutions in Sustainability Initiatives at the Local Level. *J. Clean. Prod.* 2019, 233, 1004–1015.
181. Jacobs, P.T.; Habiyaemye, A.; Fakudze, B.; Ramoroka, K.; Jonas, S. Producing Knowledge to Raise Rural Living Standards: How Universities Connect with Resource-Poor Municipalities in South Africa. *Eur. J. Dev. Res.* 2019, 31, 881–901.
182. Uyarra, E. Conceptualizing the Regional Roles of Universities, Implications and Contradictions. *Eur. Plan. Stud.* 2010, 18, 1227–1246.
183. Vaiciukevičiūtė, A.; Stankevičienė, J.; Bratčikovienė, N. Higher Education Institutions' Impact on the Economy. *J. Bus. Econ. Manag.* 2019, 20, 507–525.
184. Altbach, P.G. Peripheries and Centers: Research Universities in Developing Countries. *Asia Pac. Educ. Rev.* 2009, 10, 15–27.
185. Arbo, P.; Benneworth, P. Understanding the Regional Contribution of Higher Education Institutions: A Literature Review; OECD Education Working Papers, No. 9; OECD Publishing: Paris, France, 2007.
186. Gunasekara, C. The Generative and Developmental Roles of Universities in Regional Innovation Systems. *Sci. Public Policy* 2006, 33, 137–150.
187. Radinger-Peer, V. What Influences Universities' Regional Engagement? A Multi-Stakeholder Perspective Applying a Q-Methodological Approach. *Reg. Stud. Reg. Sci.* 2019, 6, 170–185.
188. Trippel, M.; Sinozic, T.; Smith, H.L. The Role of Universities in Regional Development: Conceptual Models and Policy Institutions in the UK, Sweden and Austria. *Eur. Plan. Stud.* 2015, 23, 1722–1740.
189. Blanco-Portela, N.; Benayas, J.; Pertierra, L.R.; Lozano, R. Towards the Integration of Sustainability in Higher Education Institutions: A Review of Drivers of and Barriers to Organisational Change and Their Comparison against Those Found in Companies. *J. Clean. Prod.* 2017, 166, 563–578.
190. Filho, W.L. About the Role of Universities and Their Contribution to Sustainable Development. *High. Educ. Policy* 2011, 24, 427–438.
191. Menon, S.; Suresh, M. Synergizing Education, Research, Campus Operations, and Community Engagements towards Sustainability in Higher Education: A Literature Review. *Int. J. Sustain. High. Educ.* 2020, 21, 1015–1051.
192. De Medici, S.; Riganti, P.; Viola, S. Circular Economy and the Role of Universities in Urban Regeneration: The Case of Ortigia, Syracuse. *Sustainability* 2018, 10, 4305.
193. Khalili, N.R.; Duecker, S.; Ashton, W.; Chavez, F. From Cleaner Production to Sustainable Development: The Role of Academia. *J. Clean. Prod.* 2015, 96, 30–43.
194. Lozano, R.; Ceulemans, K.; Alonso-Almeida, M.; Huisinck, D.; Lozano, F.J.; Waas, T.; Lambrechts, W.; Lukman, R.; Hugé, J. A Review of Commitment and Implementation of Sustainable Development in Higher Education: Results from a Worldwide Survey. *J. Clean. Prod.* 2015, 108, 1–18.
195. Sá, M.J.; Serpa, S. The Covid-19 Pandemic as an Opportunity to Foster the Sustainable Development of Teaching in Higher Education. *Sustainability* 2020, 12, 8525.
196. Bonaccorsi, A. Addressing the Disenchantment: Universities and Regional Development in Peripheral Regions. *J. Econ. Policy Reform* 2017, 20, 293–320.
197. Miller, K.; McAdam, R.; McAdam, M. A Systematic Literature Review of University Technology Transfer from a Quadruple Helix Perspective: Toward a Research Agenda. *RD Manag.* 2018, 48, 7–24.
198. Brinkhurst, M.; Rose, P.; Maurice, G.; Ackerman, J.D. Achieving Campus Sustainability: Top-down, Bottom-up, or Neither? *Int. J. Sustain. High. Educ.* 2011, 12, 338–354.
199. Güemes, C. Wish You Were Here Trust in Public Administration in Latin America. *Rev. Adm. Publica* 2019, 53, 1067–1090.
200. Ten Wolde, A. Briefing: Governments as Drivers for a Circular Economy. *Proc. Inst. Civ. Eng. Waste Resour. Manag.* 2016, 169, 149–150.
201. Guerrero, M.; Liñán, F.; Cáceres-Carrasco, F.R. The Influence of Ecosystems on the Entrepreneurship Process: A Comparison across Developed and Developing Economies. *Small Bus. Econ.* 2020.
202. Pincelli, I.P.; Meireles, S.; de Castilhos Júnior, A.B. Socio-Productive Inclusion of Waste Pickers on Segregated Solid Waste Collection in Brazilian Universities as an Instrument for Sustainability Promotion. *World Sustain. Ser.* 2019, 293–304.

203. Padilla-Rivera, A.; Russo-Garrido, S.; Merveille, N. Addressing the Social Aspects of a Circular Economy: A Systematic Literature Review. *Sustainability* 2020, 12, 7912.
204. Borrello, M.; Pascucci, S.; Caracciolo, F.; Lombardi, A.; Cembalo, L. Consumers Are Willing to Participate in Circular Business Models: A Practice Theory Perspective to Food Provisioning. *J. Clean. Prod.* 2020, 259.
205. Camacho-Otero, J.; Boks, C.; Pettersen, I.N. Consumption in the Circular Economy: A Literature Review. *Sustainability* 2018, 10, 2758.
206. Nogueira, A.; Ashton, W.; Teixeira, C.; Lyon, E.; Pereira, J. Infrastructuring the Circular Economy. *Energies* 2020, 13, 1805.
207. Cantú, A.; Aguiñaga, E.; Scheel, C. Learning from Failure and Success: The Challenges for Circular Economy Implementation in SMEs in an Emerging Economy. *Sustainability* 2021, 13, 1529.
208. Thomas, E.; Faccin, K.; Asheim, B.T. Universities as Orchestrators of the Development of Regional Innovation Ecosystems in Emerging Economies. *Growth Chang.* 2020.
209. Xiao, Y.; Lenzen, M.; Benoît-Norris, C.; Norris, G.A.; Murray, J.; Malik, A. The Corruption Footprints of Nations. *J. Ind. Ecol.* 2018, 22, 68–78.
210. Hedlund-de Witt, A. Rethinking Sustainable Development: Considering How Different Worldviews Envision “Development” and “Quality of Life”. *Sustainability* 2014, 6, 8310–8328.
211. de-Oliveira, F.; Rodil-Marzábal, Ó. Structural Characteristics and Organizational Determinants as Obstacles to Innovation in Small Developing Countries. *Technol. Forecast. Soc. Chang.* 2019, 140, 306–314.
212. Ghinai, S.; Silvestri, F.; Steiner, B. The Role of Local Stakeholders in Disseminating Knowledge for Supporting the Circular Economy: A Network Analysis Approach. *Ecol. Econ.* 2020, 169.
213. Harrison, J.; Turok, I. Universities, Knowledge and Regional Development. *Reg. Stud.* 2017, 51, 977–981.
214. Hermannsson, K.; Lisenkova, K.; Lecca, P.; McGregor, P.G.; Swales, J.K. The External Benefits of Higher Education. *Reg. Stud.* 2017, 51, 1077–1088.
215. Sarpong, D.; AbdRazak, A.; Alexander, E.; Meissner, D. Organizing Practices of University, Industry and Government That Facilitate (or Impede) the Transition to a Hybrid Triple Helix Model of Innovation. *Technol. Forecast. Soc. Chang.* 2017, 123, 142–152.
216. Buch, R.; O'Neill, D.; Lubenow, C.; DeFilippis, M.; Dalrymple, M. Collaboration for Regional Sustainable Circular Economy Innovation. In *Handbook of Engaged Sustainability*; Springer: New York, NY, USA, 2018; Volume 2.
217. Scheel, C.; Aguiñaga, E.; Bello, B. Decoupling Economic Development from the Consumption of Finite Resources Using Circular Economy. A Model for Developing Countries. *Sustainability* 2020, 12, 1291.
218. Korhonen, J.; Honkasalo, A.; Seppälä, J. Circular Economy: The Concept and Its Limitations. *Ecol. Econ.* 2018, 143, 37–46.
219. Cullen, J.M. Circular Economy: Theoretical Benchmark or Perpetual Motion Machine? *J. Ind. Ecol.* 2017, 21, 483–486.
220. Skene, K.R. Circles, Spirals, Pyramids and Cubes: Why the Circular Economy Cannot Work. *Sustain. Sci.* 2018, 13, 479–492.
221. Korhonen, J.; Nuur, C.; Feldmann, A.; Birkie, S.E. Circular Economy as an Essentially Contested Concept. *J. Clean. Prod.* 2018, 175, 544–552.
222. Ghisellini, P.; Cialani, C.; Ulgiati, S. A Review on Circular Economy: The Expected Transition to a Balanced Interplay of Environmental and Economic Systems. *J. Clean. Prod.* 2016, 114, 11–32.
223. Corvellec, H.; Böhm, S.; Stowell, A.; Valenzuela, F. Introduction to the Special Issue on the Contested Realities of the Circular Economy. *Cult. Organ.* 2020, 26, 97–102.
224. Moreau, V.; Sahakian, M.; van Griethuysen, P.; Vuille, F. Coming Full Circle: Why Social and Institutional Dimensions Matter for the Circular Economy. *J. Ind. Ecol.* 2017, 21, 497–506.