sustainability

MDPI

Editorial

Development Goals towards Sustainability

Syed Mithun Ali [1], Andrea Appolloni [2], Fausto Cavallaro [3], Idiano D'Adamo [4,*], Assunta Di Vaio [5], Francesco Ferella [6], Massimo Gastaldi [6], Muhammad Ikram [7], Nallapaneni Manoj Kumar [8,9,10], Michael Alan Martin [11], Abdul-Sattar Nizami [12], Ilhan Ozturk [13,14], Maria Pia Riccardi [15], Paolo Rosa [16], Ernesto Santibanez Gonzalez [17], Claudio Sassanelli [18], Davide Settembre-Blundo [19,20], Rajesh Kumar Singh [21], Marzena Smol [22], Georgios Archimidis Tsalidis [23,24], Irene Voukkali [25], Nan Yang [26] and Antonis A. Zorpas [25]

1 Department of Industrial and Production Engineering, Bangladesh University of Engineering and Technology, Dhaka 1000, Bangladesh; mithun@ipe.buet.ac.bd or syed.mithun@gmail.com
2 Department of Management and Law, School of Economics, University of Rome Tor Vergata, Via Columbia 2, 00133 Roma, Italy; andrea.appolloni@uniroma2.it
3 Department of Economics, University of Molise, Via de Sanctis, 86100 Campobasso, Italy; cavallaro@unimol.it
4 Department of Computer, Control and Management Engineering, Sapienza University of Rome, Via Ariosto 25, 00185 Roma, Italy
5 Department of Law, University of Naples "Parthenope", 80132 Napoli, Italy; susy.divaio@uniparthenope.it
6 Department of Industrial Engineering, Information and Economics, University of L'Aquila, 67100 L'Aquila, Italy; francesco.ferella@univaq.it (F.F.); massimo.gastaldi@univaq.it (M.G.)
7 School of Business Administration, Al Akhawayn University in Ifrane, Ave. Hassan II, P.O. Box 104, Ifrane 53000, Morocco; i.muhammad@aui.ma
8 School of Energy and Environment, City University of Hong Kong, Kowloon, Hong Kong; mnallapan2-c@my.cityu.edu.hk or nallapaneni.manoj@ssbm.ch
9 Center for Research and Innovation in Science, Technology, Engineering, Arts, and Mathematics (STEAM) Education, HICCER—Hariterde International Council of Circular Economy Research, Palakkad 678631, India
10 Swiss School of Business and Management Geneva, Avenue des Morgines 12, 1213 Genève, Switzerland
11 Life Cycle Management, Sustainable Society, IVL Swedish Environmental Research Institute, 114 28 Stockholm, Sweden; michael.martin@ivl.se
12 Sustainable Development Study Centre, Government College University, Lahore 54000, Pakistan; nizami_pk@yahoo.com
13 College of Business Administration, University of Sharjah, Sharjah 27272, United Arab Emirates; iozturk@sharjah.ac.ae
14 Faculty of Economics, Administrative and Social Sciences, Nisantasi University, 25370 Istanbul, Turkey
15 Department of Earth and Environmental Sciences, University of Pavia, 27100 Pavia, Italy; mariapia.riccardi@unipv.it
16 Department of Management, Economics and Industrial Engineering, Politecnico di Milano, 20133 Milano, Italy; paolo1.rosa@polimi.it
17 Department of Industrial Engineering, Faculty of Engineering, University of Talca, Los Niches km 1, Curico 3340000, Chile; esantibanez@utalca.cl
18 Department of Mechanics, Mathematics and Management, Politecnico di Bari, 70126 Bari, Italy; claudio.sassanelli@poliba.it
19 Department of Business Administration (ADO), Rey Juan Carlos University, 28032 Madrid, Spain; davide.settembre@urjc.es
20 Department of Economics and Management, University of Pavia, 27100 Pavia, Italy
21 Management Development Institute (MDI), Gurgaon 122007, India; rajesh.singh@mdi.ac.in
22 Mineral and Energy Economy Research Institute, Polish Academy of Sciences, 02-668 Warsaw, Poland; smol@meeri.pl
23 Environmental and Networking Technologies and Applications Unit, Athena—Research and Innovation Center in Information, Communication and Knowledge Technologies, 67100 Athens, Greece; gatsalidis@athenarc.gr or george.tsalidis@brunel.ac.uk
24 Department of Civil and Environmental Engineering, Brunel University London, London UB8 3PH, UK
25 Laboratory of Chemical Engineering and Engineering Sustainability, Faculty of Pure and Applied Sciences, Open University of Cyprus, Giannou Kranidioti, 89, Latsia, 2236 Nicosia, Cyprus; irene.voukkali1@ouc.ac.cy (I.V.); antonis.zorpas@ouc.ac.cy or antoniszorpas@yahoo.com (A.A.Z.)

check for updates

Citation: Ali, S.M.; Appolloni, A.; Cavallaro, F.; D'Adamo, I.; Di Vaio, A.; Ferella, F.; Gastaldi, M.; Ikram, M.; Kumar, N.M.; Martin, M.A.; et al. Development Goals towards Sustainability. *Sustainability* **2023**, *15*, 9443. https://doi.org/10.3390/su15129443

Received: 21 April 2023
Accepted: 9 June 2023
Published: 12 June 2023

[26] School of Physical Science and Technology, ShanghaiTech University, Zhangjiang Campus, 393 Middle Huaxia Road, Shanghai 200031, China; yangnan@shanghaitech.edu.cn
* Correspondence: idiano.dadamo@uniroma1.it

Sustainability's growth, year after year, continues to be staggering, becoming a reference point for those working on these issues. There are 65,433 papers in the Scopus database, of which 61,016 (93%) are articles. The year 2022 proposes 16,996 papers, 21% more than the previous year (14,053 papers). The comparison is even more significant compared to five (2372 papers in 2017) or ten years (167 papers in 2012) ago. In addition, the value for 2023 is already significant (5638 papers). These data are extrapolated from the Scopus database (up to 12 May 2023). The most involved subject areas are energy, environmental science, and social science. Concerning the keywords, the most proposed terms in published papers are sustainability (16,328), China (11,051), and sustainable development (8475). In particular, the country of reference of authors shows that China leads with 18,849 papers, followed by the United States (5685), Spain (5197), South Korea (5012), and Italy (4716). The international nature of the journal is highlighted by the other countries completing the Top 10: United Kingdom, Germany, Poland, Saudi Arabia, and Australia. The journal aims to provide answers to current problems [1,2] and, for that reason, has more than thirty sections.

This Editorial has the idea of presenting a new section, Development Goals towards Sustainability, that aims to play an ambitious role in the research landscape (https://www.mdpi.com/journal/sustainability/sections/Development-Goals-towards-Sustainability). Member countries of the United Nations signed the 2030 Agenda for Sustainable Development in 2015, consisting of 17 Sustainable Development Goals (SDGs). These SDGs aim to protect the planet, eliminate poverty, and ensure peace and prosperity for all citizens. The literature highlights how sustainable development is a relevant necessity for humanity [3]. Achieving such an ambitious goal requires contributions from all countries [4]. The theme turns out to be decomposed into multiple dimensions and perspectives, and concerns different categories of stakeholders that can combine digitization with sustainability [5], support the integration of food security and sustainability in emerging economies [6], identify the connection point between technological progress and sustainable development [7], and use the resources that are available in order to optimize processes [8]. At the same time, the impact of female gender [9] and the contribution of youth [10] toward the SDGs need to be assessed. In addition, a better understanding of artistic artifacts integrates memories of the past with contemporary experiences and life. These are the premises for transforming cultural heritage management into an enabler of sustainable development by boosting regional economies through sustainable tourism practices [11]. Health-related sustainability issues play a key role, and several initiatives can be taken early in life. For example, gestational diabetes mellitus appears to be one of the main causes of perinatal mortality/morbidity [12]. A review highlights how improving eye health can support the achievement of several SDGs [13].

Challenges in planning policies, new business models, strategies, and tools to measure or evaluate sustainability and reduce the uncertainty of the implementation process require new analysis that cannot be limited to analysis of the environmental dimension of sustainability alone [14]. In this direction, indicators need to be developed to monitor the progress of sustainability goals [15]. The application and implementation of the SDGs require setting development priorities to be applied in different contexts, and quantitative approaches are proposed to integrate the different SDGs at both local [16] and global [17] levels.

Finally, there are analyses that focus specifically on environmental [18], economic [19], and social [20] aspects. In this way, the literature highlights the relevance of a multi-level approach related to sustainability issues [21]. Bioeconomy, circular economy, and green economy are concepts geared toward promoting sustainability [22]. In addition, public procurement can foster circular models [23], flexible strategies are strategic to support firms [24], waste is a potential resource, in particular for developing countries [25], and we need to provide robustness to the results obtained through alternative scenarios [26].

The 17 SDGs to transform our world are as follows:

- SDG 1: No Poverty.
- SDG 2: Zero Hunger.
- SDG 3: Good Health and Well-Being.
- SDG 4: Quality Education.
- SDG 5: Gender Equality.
- SDG 6: Clean Water and Sanitation.
- SDG 7: Affordable and Clean Energy.
- SDG 8: Decent Work and Economic Growth.
- SDG 9: Industry, Innovation and Infrastructure.
- SDG 10: Reduced Inequality.
- SDG 11: Sustainable Cities and Communities.
- SDG 12: Responsible Consumption and Production.
- SDG 13: Climate Action.
- SDG 14: Life Below Water.
- SDG 15: Life on Land.
- SDG 16: Peace and Justice Strong Institutions.
- SDG 17: Partnerships to achieve the SDG.

The topic of the SDGs is very well debated in the literature and has a decidedly growing trend—Figure 1. In the past four and a half years, about 27,910 papers have been noted, where the keywords used in the Web of Science (WoS) were: (i) SDGs; (ii) Sustainable Development Goals; and (iii) SDG. The open access value shows that this option now represents the majority among published papers, even exceeding three-fifths. The 2023 data are close to that figure with 59%. We proceed to analyze the WoS categories (Figure 2), in which that related to Environmental Sciences stands out (29%) followed by Green Sustainable Science Technology (22%) and Environmental Studies (19%). The others turn out to be more detached, starting with Public Environmental Occupational Health (6%). Below, the geographical distribution of the published papers is analyzed (Figure 3), with two countries excelling over all others with about 15%: the USA (4154) and China (4138). It should be highlighted that the top ten countries encompass about 83% of the total value: United Kingdom (3115), India (2091), Australia (1963), Spain (1931), Germany (1675), Italy (1600), Canada (1315) and South Africa (1221). The trend in papers published by the WoS Index (Figure 4) has the Science Citation Index Expanded (58%) leading, followed by the Social Sciences Citation Index (42%). The trend in papers published by the WoS Index (Figure 4) sees the Science Citation Index Expanded excel (58%), followed by the Social Sciences Citation Index (42%). Finally, the last analysis proposes a map of the SDGs receiving the most attention (Figure 5). The results show that SDG 3 (1244) prevails followed by SDG 2 (1212) and SDG 1 (1201). SDG 14 (353) and SDG 16 (314) complete the ranking.

Sustainability can be a concept that integrates nature and harmony, a landscape that wants to be animated by people in celebration, aiming for territories to be self-sufficient and to cooperate with each other by involving citizens in decision making [27]. In this context, universities must take on a new role: greater accountability to students, who must be listened to in order to engender a cultural change centered around greater responsibility toward others. Thus, there is a combination of sustainable education and trust in young people on which to build future society [10]. The hope is to favor strategies that place the concept of pragmatic sustainability, which must be distinguished from ideological sustainability, at the center of their choice. It emerges unequivocally that sustainable washing does not solve problems and that solutions that integrate the three dimensions of sustainability must be framed.

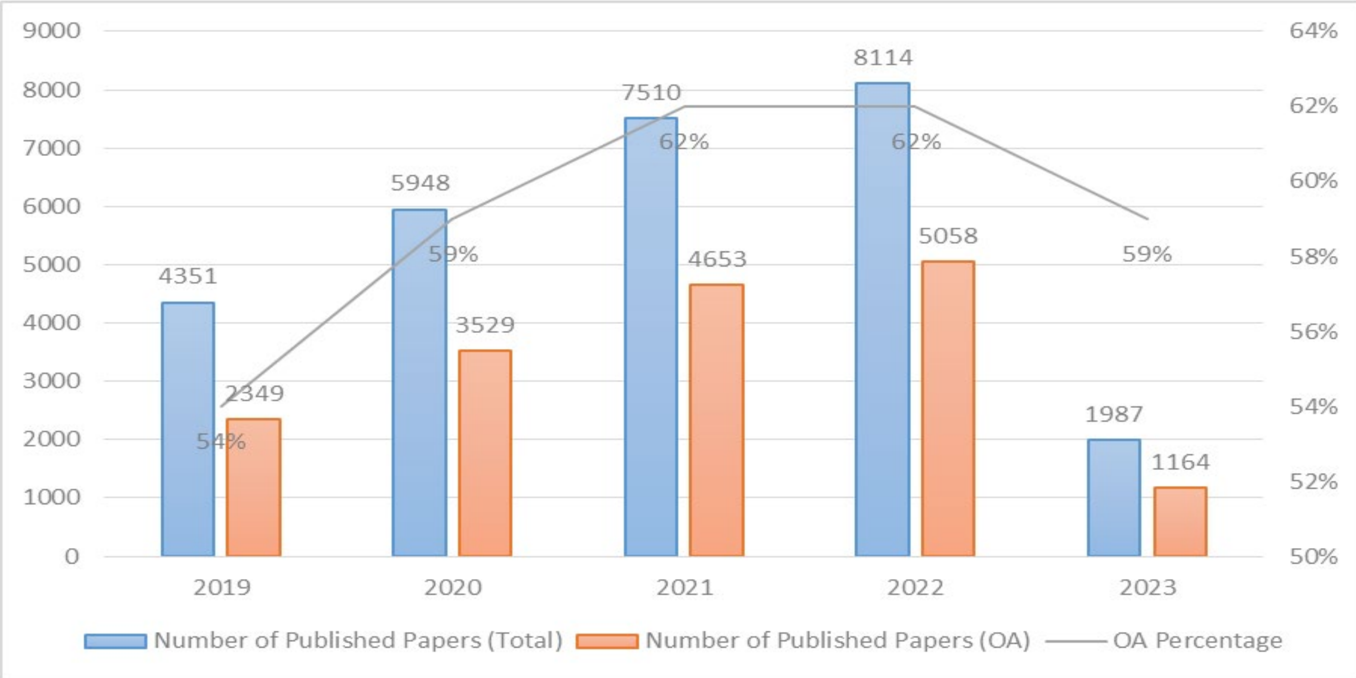

Figure 1. Trend in published articles in the subject area of Sustainable Development Goals. Source: Web of Science (accessed on 19 April 2023). Note: Conducted Keyword Research in WoS: Topic (SDGs or Sustainable Development Goals or SDG). Time frame: last five years 2019–2023; Total N = 27,910; OA N = 16,753. OA = open access.

Figure 2. Trend in published articles per Web of Science categories (top 10 categories).

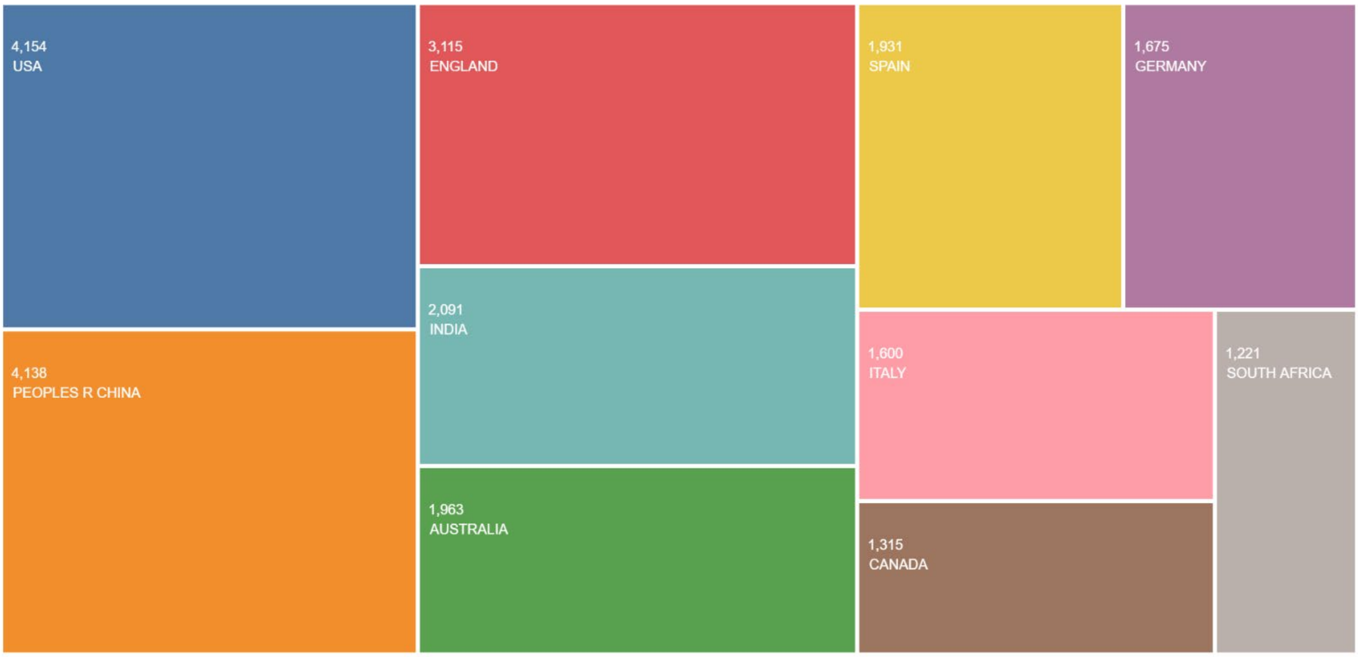

Figure 3. Trend in published papers per country (top 10 countries).

Figure 4. Trend in published papers per Web of Science Index.

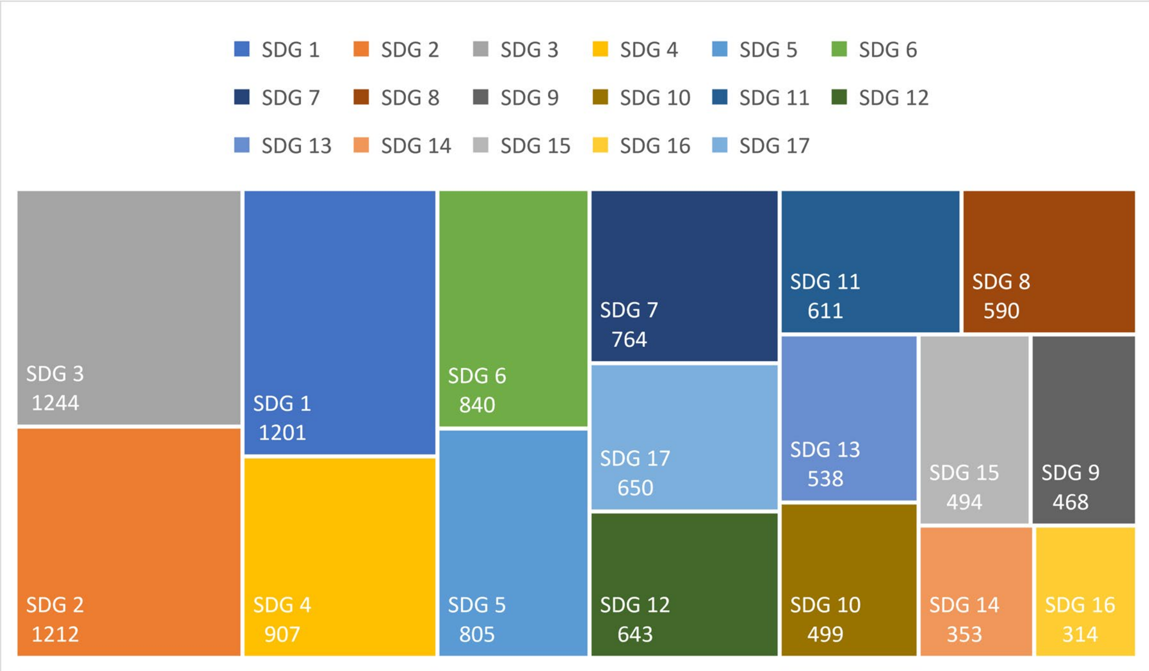

Figure 5. Trend in published papers per SDG in the last five years (2019–2023).

Furthermore, beyond the qualitative and aesthetic aspects, it is necessary to provide numbers that support our actions. In this context, it is also necessary to be a team in the service of science. Therefore, in proposing a paper for our section, we suggest that you identify a paper published no longer ago than the previous year and, from that, propose the gap you intend to fill with your research. Here, each editorial board member proposes their research direction that you can use to explain the novelty of your analysis:

- Multi-criteria decision analysis (MCDA) can provide policy implications that identify sustainable investments and projects needed for an area to be more competitive, circular, inclusive, and resilient. In addition, MCDA can identify the resources and expertise needed to make the different SDGs interact based on stakeholder engagement [28].
- The gross domestic product cannot capture the full economic dimension of sustainability. Therefore, it is necessary to consider an aggregate analysis of sustainability indicators. For example, analyses should consider as much the cost of pollution as the cost of citizen discomfort caused by natural disasters, but also the do-nothing cost.
- A supply chain is a very broad concept that defines the complexity of a business process. Industry 4.0 technologies have had a disruptive impact, and their extension to circular economy models makes it possible to meet the needs of stakeholders [29].
- There is a need to identify new sourcing strategies and procurement operations to take advantage of natural resources and waste from the manufacturing system. Multi-level analysis can support decision-makers in developing circular purchasing [30].
- The Social-Life Cycle Assessment (S-LCA) allows for evaluating the social and socioeconomic aspects of products, thus assessing both the positive and negative impacts that occur during the life cycle. S-LCA can be applied to analyze the contribution of products to the SDGs and assess the social impacts of the circular economy. The goal is to eliminate waste and pollution by design, extend the use of products and materials, and regenerate natural systems [31].
- Shifting from a consumer to a prosumer role is essential for a sustainable transition, in which new business models are needed to identify integration between energy systems and chemical clusters. The goal is to promote the green transition in tandem with resilience and lower carbon use [32].

- A country's level of informality influences how the adoption of digitization impacts corporate environmental responsibility. As a result, countries with a high level of informality cannot properly influence digitization and achieve sustainable solutions [33].
- The challenge to climate change is a key strategy in an environmental policy agenda. The need to increase monetary funds to finance renewable energy technology development and processes that improve the use of natural resources is highlighted [34].
- Digital technologies support the development of manufacturing firms. Through their deployment, companies can provide product–service systems, which play a strategic role in addressing the sustainability concept in its threefold perspective (economic, environmental, and social) and can increase companies' competitiveness, maintain and extend relationships with clients, and transfer ownership and operational accountability of the solution to the supplier [35].
- Industrial waste represents a considerable amount of secondary raw materials. Several waste types contain valuable metals at a greater concentration than those in the primary ores—even ten- or a hundred-fold more. Metals such as cobalt, nickel, lithium, vanadium, rare earth elements, etc., are essential to transition to a fully sustainable industry. Hence, their extraction and refining are more economical than primary ore processing, making recycling an attractive and convenient investment [36].
- Applying cognitive technologies, such as artificial intelligence, can support manufacturing companies in reducing the complexity of supply and distribution chains. With the large processing capacity of data produced by supply chain actors and collected through the digital systems of smart factories, more environmentally and socioeconomically sustainable processes and products can be designed [37].
- Manufacturing firms can consider customer needs from a price perspective, but also strive to include green-circular premium and sustainability certification as enablers toward strategic innovation.
- Enterprises should clarify responsibility for the effects of adopting green technologies and renewable resources on social sustainability (e.g., gender equality) in the transition process towards zero-carbon energy. In addition, they should achieve their legitimacy for disclosures on accounting tools related to carbon emissions (e.g., carbon accounting). The challenges for enterprises consist of mitigating stakeholders' pressure through a resilient and accountable approach. This also presents the need for a rethink about integrated reporting to achieve legitimacy in the transition toward net-zero business models [38].
- Solid-waste management requires focused planning for sustainability by diverting waste from landfills. At the same time, there is a need for international support for low-income countries. The literature needs to support municipalities in these countries to calculate their resources, identify where to allocate facilities to optimize transportation, and provide for integration with the private sector [25].
- Water management is essential to sustainable development, affecting human health, ecosystems, and economic activities. Therefore, research should focus on innovative water management practices such as water reuse, green infrastructure, wastewater to energy, and storm water management to address water scarcity, water quality, and flooding challenges.
- Sustainable mobility and transportation planning are key aspects of sustainable development that can help reduce environmental impact. Therefore, a need exists for research that can explore innovative approaches to mobility, such as shared mobility services, electrification of transportation, and the promotion of active modes of transportation for a more sustainable, equitable, and accessible future [39].
- Inclusive and participatory governance is a cornerstone of sustainable development, ensuring that decision-making processes are transparent, accountable, and responsive to the needs of all stakeholders. Therefore, research should explore the potential of participatory approaches, such as community-based planning, in promoting sustainable development.

- Future analysis can focus on how artificial intelligence (AI) can help the healthcare industry achieve the SDGs. Researchers can also provide information on the way the new AI business models in the healthcare industry can be used to enhance customer satisfaction and service quality. Health system optimization requires investment in AI technologies, including machine learning, deep learning and artificial neural networks [40].
- Energy infrastructure has a crucial impact on combating climate change and decarbonizing the energy system. Interdependencies need to be assessed with established methods and analyses that show progress toward the SDGs.
- The modern interconnected world is run by critical infrastructure sectors (CISs), and they are efficient in terms of productivity. However, the intricately interwoven nature makes CISs vulnerable to disruptions. On the other hand, climate change impacts caused by various reasons can trigger black-swan events with significant cascading social, economic, and environmental implications that threaten our society as we know it. Since the CISs are essential and complex systems, the raised issues cannot be solved with traditional knowledge. We strongly believe that circular-economy-centric education in line with resilience and digitalization principles is the only solution, as they adopt nexus and circular thinking and systems innovation to generate new knowledge that ultimately support the progress of development goals [41].
- Collaborative ties are typically driven by economic motives. Sustainable practices in a developing country can be constrained by two factors: the absence of a regulatory regime and the informal networks of recyclers. The topic of industrial symbiosis can provide multiple benefits, but it needs policy inputs that can foster proactive engagement and support small and medium-sized firms. In addition, rigorous life cycle analyses of by-products are required [42].
- Biofuels are a renewable source that can ensure energy security and mitigate climate change. The location selection of biofuel production plants is an important concern for the policymakers and local authorities. The identification of sites for the development of new biofuel production plants encompasses several dimensions which can be solved by multicriteria approaches [43].
- Young researchers and top-class scientists should prepare an outstanding scientific article that will make a significant contribution to science and the implementation of the sustainable goals. Without limitation, this research should have a strategic approach and should compile gamified approach, environmental performance, life cycle assessment, waste management tools, internet of things, and new circular business models as well as new mindset development [44].
- Cities are critical factors in implementing the sustainability agenda and without limitation, more than 60% of the proposed SDG goals (169) target cities. Cities with an urban metabolism 15 and/or 30 min. are essential for environmental health wellbeing [14].
- Mathematical and statistical optimization methods support decision making. Some activities, such as the use of fossil fuels, the unsuitable disposal of waste, and improper supply chain practices, damage ecosystems. People's actions, lifestyles, and traditional industrial practices should be changed to achieve sustainable development [45].
- Climate change progressing has led to the need to implement integrated measures to protect the planet. For this purpose, a number of recommendations, policies and restrictions have been developed, which are included in the Green Deal Strategies. This plan requires stakeholder support for a clean and green economy through solutions that protect the environment, considering all dimensions of sustainability [46].
- Green technologies optimize resource use by reducing waste and decreasing demand for new resources, and promote the development of green products and services. These include energy-efficient appliances, electric vehicles, and sustainable construction materials. By encouraging the use of green products and services, green technology helps to reduce the environmental impact of consumption [47].

- Cities are called upon to implement strategies to be livable. This requires sustainable policies and green investments, but also political stability and efficient public spending.
- Energy communities represent a new form of social collaboration that aims to make the citizen a protagonist of change. The price of electricity tends to rise, and the role of the prosumer favors decentralized models.

This section favors pragmatic models of sustainability in which a selfish view is overcome, and an altruistic model is favored on which to build future society. "It is strongly suggested that the authors highlight the SDGs they intend to achieve, in order to support raising awareness about the 2030 Agenda for Sustainable Development and the implementation of the SDGs into our everyday lives".

Author Contributions: Conceptualization, S.M.A., A.A., F.C., I.D., A.D.V., F.F., M.G., M.I., N.M.K., A.-S.N., M.A.M., I.O., M.P.R., P.R., E.S.G., C.S., D.S.-B., R.K.S., M.S., G.A.T., I.V., N.Y. and A.A.Z.; writing—original draft preparation, S.M.A., A.A., F.C., I.D., A.D.V., F.F., M.G., M.I., N.M.K., A.-S.N., M.A.M., I.O., M.P.R., P.R., E.S.G., C.S., D.S.-B., R.K.S., M.S., G.A.T., I.V., N.Y. and A.A.Z.; writing—review and editing, S.M.A., A.A., F.C., I.D., A.D.V., F.F., M.G., M.I., N.M.K., A.-S.N., M.A.M., I.O., M.P.R., P.R., E.S.G., C.S., D.S.-B., R.K.S., M.S., G.A.T., I.V., N.Y. and A.A.Z.; supervision, I.D. All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. D'Adamo, I.; Ioppolo, G.; Shen, Y.; Rosen, M.A. Sustainability Survey: Promoting Solutions to Real-World Problems. *Sustainability* **2022**, *14*, 12244. [CrossRef]
2. Tang, M.; Liao, H.; Wan, Z.; Herrera-Viedma, E.; Rosen, M.A. Ten Years of Sustainability (2009 to 2018): A Bibliometric Overview. *Sustainability* **2018**, *10*, 1655. [CrossRef]
3. Patuelli, A.; Saracco, F. Sustainable development goals as unifying narratives in large UK firms' Twitter discussions. *Sci. Rep.* **2023**, *13*, 7017. [CrossRef]
4. Halkos, G.; Gkampoura, E.-C. Where do we stand on the 17 Sustainable Development Goals? An overview on progress. *Econ. Anal. Policy* **2021**, *70*, 94–122. [CrossRef]
5. Schöggl, J.-P.; Rusch, M.; Stumpf, L.; Baumgartner, R.J. Implementation of digital technologies for a circular economy and sustainability management in the manufacturing sector. *Sustain. Prod. Consum.* **2023**, *35*, 401–420. [CrossRef]
6. Alam, M.F.B.; Tushar, S.R.; Zaman, S.M.; Gonzalez, E.D.R.S.; Bari, A.B.M.M.; Karmaker, C.L. Analysis of the drivers of Agriculture 4.0 implementation in the emerging economies: Implications towards sustainability and food security. *Green Technol. Sustain.* **2023**, *1*, 100021. [CrossRef]
7. Tseng, M.L.; Lim, M.K.; Ali, M.H.; Christianti, G.; Juladachah, P. Assessing the sustainable food system in Thailand under uncertainties: Governance, distribution and storage drive technological innovation. *J. Ind. Prod. Eng.* **2022**, *39*, 1–18. [CrossRef]
8. Gramegna, G.; Scortica, A.; Scafati, V.; Ferella, F.; Gurrieri, L.; Giovannoni, M.; Bassi, R.; Sparla, F.; Mattei, B.; Benedetti, M. Exploring the potential of microalgae in the recycling of dairy wastes. *Bioresour. Technol. Rep.* **2020**, *12*, 100604. [CrossRef]
9. Di Vaio, A.; Hassan, R.; Palladino, R. Blockchain technology and gender equality: A systematic literature review. *Int. J. Inf. Manag.* **2022**, *68*, 102517. [CrossRef]
10. D'Adamo, I.; Gastaldi, M. Perspectives and Challenges on Sustainability: Drivers, Opportunities and Policy Implications in Universities. *Sustainability* **2023**, *15*, 3564. [CrossRef]
11. Settembre Blundo, D.; García Muiña, F.E.; Fernández del Hoyo, A.P.; Riccardi, M.P.; Maramotti Politi, A.L. Sponsorship and patronage and beyond. *J. Cult. Herit. Manag. Sustain. Dev.* **2017**, *7*, 147–163. [CrossRef]
12. Abella, L.; D'Adamo, E.; Strozzi, M.; Sanchez-de-Toledo, J.; Perez-Cruz, M.; Gómez, O.; Abella, E.; Cassinari, M.; Guaschino, R.; Mazzucco, L.; et al. S100B Maternal Blood Levels in Gestational Diabetes Mellitus Are Birthweight, Gender and Delivery Mode Dependent. *Int. J. Environ. Res. Public Health* **2022**, *19*, 1028. [CrossRef] [PubMed]
13. Zhang, J.H.; Ramke, J.; Jan, C.; Bascaran, C.; Mwangi, N.; Furtado, J.M.; Yasmin, S.; Ogundo, C.; Yoshizaki, M.; Marques, A.P.; et al. Advancing the Sustainable Development Goals through improving eye health: A scoping review. *Lancet Planet. Health* **2022**, *6*, e270–e280. [CrossRef] [PubMed]
14. Voukkali, I.; Zorpas, A.A. Evaluation of urban metabolism assessment methods through SWOT analysis and analytical hierocracy process. *Sci. Total Environ.* **2021**, *807*, 150700. [CrossRef]
15. Liu, Y.; Huang, B.; Guo, H.; Liu, J. A big data approach to assess progress towards Sustainable Development Goals for cities of varying sizes. *Commun. Earth Environ.* **2023**, *4*, 66. [CrossRef]
16. Xu, Z.; Chau, S.N.; Chen, X.; Zhang, J.; Li, Y.; Dietz, T.; Wang, J.; Winkler, J.A.; Fan, F.; Huang, B.; et al. Assessing progress towards sustainable development over space and time. *Nature* **2020**, *577*, 74–78. [CrossRef]

17. Miola, A.; Schiltz, F. Measuring sustainable development goals performance: How to monitor policy action in the 2030 Agenda implementation? *Ecol. Econ.* **2019**, *164*, 106373. [CrossRef]
18. Usman, O.; Iorember, P.T.; Ozturk, I.; Bekun, F.V. Examining the Interaction Effect of Control of Corruption and Income Level on Environmental Quality in Africa. *Sustainability* **2022**, *14*, 11391. [CrossRef]
19. Gyamfi, B.A.; Adebayo, T.S.; Bekun, F.V.; Agyekum, E.B.; Kumar, N.M.; Alhelou, H.H.; Al-Hinai, A. Beyond environmental Kuznets curve and policy implications to promote sustainable development in Mediterranean. *Energy Rep.* **2021**, *7*, 6119–6129. [CrossRef]
20. Tsalidis, G.A.; Xevgenos, D.; Ktori, R.; Krishnan, A.; Posada, J.A. Social life cycle assessment of a desalination and resource recovery plant on a remote island: Analysis of generic and site-specific perspectives. *Sustain. Prod. Consum.* **2023**, *37*, 412–423. [CrossRef]
21. Nikolaou, I.E.; Tsagarakis, K.P. An introduction to circular economy and sustainability: Some existing lessons and future directions. *Sustain. Prod. Consum.* **2021**, *28*, 600–609. [CrossRef]
22. Ferreira Gregorio, V.; Pié, L.; Terceño, A. A Systematic Literature Review of Bio, Green and Circular Economy Trends in Publications in the Field of Economics and Business Management. *Sustainability* **2018**, *10*, 4232. [CrossRef]
23. Alhola, K.; Ryding, S.-O.; Salmenperä, H.; Busch, N.J. Exploiting the Potential of Public Procurement: Opportunities for Circular Economy. *J. Ind. Ecol.* **2019**, *23*, 96–109. [CrossRef]
24. Sushil. Valuation of Flexibility. *Glob. J. Flex. Syst. Manag.* **2015**, *16*, 219–220. [CrossRef]
25. Iqbal, A.; Abdullah, Y.; Nizami, A.S.; Sultan, I.A.; Sharif, F. Assessment of Solid Waste Management System in Pakistan and Sustainable Model from Environmental and Economic Perspective. *Sustainability* **2022**, *14*, 12680. [CrossRef]
26. Mishra, A.R.; Rani, P.; Cavallaro, F.; Hezam, I.M. Intuitionistic fuzzy fairly operators and additive ratio assessment-based integrated model for selecting the optimal sustainable industrial building options. *Sci. Rep.* **2023**, *13*, 5055. [CrossRef]
27. D'Adamo, I.; Gastaldi, M.; Imbriani, C.; Morone, P. Assessing regional performance for the Sustainable Development Goals in Italy. *Sci. Rep.* **2021**, *11*, 24117. [CrossRef]
28. D'Adamo, I.; Gastaldi, M. Sustainable Development Goals: A Regional Overview Based on Multi-Criteria Decision Analysis. *Sustainability* **2022**, *14*, 9779. [CrossRef]
29. Taddei, E.; Sassanelli, C.; Rosa, P.; Terzi, S. Circular supply chains in the era of Industry 4.0: A systematic literature review. *Comput. Ind. Eng.* **2022**, *170*, 108268. [CrossRef]
30. Qazi, A.A.; Appolloni, A. A systematic review on barriers and enablers toward circular procurement management. *Sustain. Prod. Consum.* **2022**, *33*, 343–359. [CrossRef]
31. Tsalidis, G.A.; de Santo, E.; Gallart, J.J.E.; Corberá, J.B.; Blanco, F.C.; Pesch, U.; Korevaar, G. Developing social life cycle assessment based on corporate social responsibility: A chemical process industry case regarding human rights. *Technol. Forecast. Soc. Chang.* **2021**, *165*, 120564. [CrossRef]
32. Appolloni, A.; Centi, G.; Yang, N. Promoting carbon circularity for a sustainable and resilience fashion industry. *Curr. Opin. Green Sustain. Chem.* **2023**, *39*, 100719. [CrossRef]
33. Heredia, J.; McIntyre, J.R.; Rubiños, C.; Santibañez Gonzalez, E.; Flores, A. A configuration approach to explain corporate environmental responsibility behavior of the emerging economies firms at industry 4.0. *J. Clean. Prod.* **2023**, *395*, 136383. [CrossRef]
34. He, X.; Khan, S.; Ozturk, I.; Murshed, M. The role of renewable energy investment in tackling climate change concerns: Environmental policies for achieving SDG-13. *Sustain. Dev.* **2023**, *31*, 1888–1901. [CrossRef]
35. Lamperti, S.; Cavallo, A.; Sassanelli, C. Digital Servitization and Business Model Innovation in SMEs: A Model to Escape From Market Disruption. *IEEE Trans. Eng. Manag.* **2023**, 1–15. [CrossRef]
36. Ippolito, N.M.; Amato, A.; Innocenzi, V.; Ferella, F.; Zueva, S.; Beolchini, F.; Vegliò, F. Integrating life cycle assessment and life cycle costing of fluorescent spent lamps recycling by hydrometallurgical processes aimed at the rare earths recovery. *J. Environ. Chem. Eng.* **2022**, *10*, 107064. [CrossRef]
37. Fernández-Miguel, A.; Riccardi, M.P.; Veglio, V.; García-Muiña, F.E.; Fernández del Hoyo, A.P.; Settembre-Blundo, D. Disruption in Resource-Intensive Supply Chains: Reshoring and Nearshoring as Strategies to Enable Them to Become More Resilient and Sustainable. *Sustainability* **2022**, *14*, 10909. [CrossRef]
38. Di Vaio, A.; Zaffar, A.; Balsalobre-Lorente, D.; Garofalo, A. Decarbonization technology responsibility to gender equality in the shipping industry: A systematic literature review and new avenues ahead. *J. Shipp. Trade* **2023**, *8*, 9. [CrossRef]
39. Qyyum, M.A.; Ihsanullah, I.; Ahmad, R.; Ismail, S.; Khan, A.; Nizami, A.-S.; Tawfik, A. Biohydrogen production from real industrial wastewater: Potential bioreactors, challenges in commercialization and future directions. *Int. J. Hydrogen Energy* **2022**, *47*, 37154–37170. [CrossRef]
40. Vishwakarma, L.P.; Singh, R.K.; Mishra, R.; Kumari, A. Application of artificial intelligence for resilient and sustainable healthcare system: Systematic literature review and future research directions. *Int. J. Prod. Res.* **2023**, 1–23. [CrossRef]
41. Kumar, N.M.; Chopra, S.S. Leveraging Blockchain and Smart Contract Technologies to Overcome Circular Economy Implementation Challenges. *Sustainability* **2022**, *14*, 9492. [CrossRef]
42. Akhtar, N.; Bokhari, S.A.; Martin, M.A.; Saqib, Z.; Khan, M.I.; Mahmud, A.; Zaman-ul-Haq, M.; Amir, S. Uncovering Barriers for Industrial Symbiosis: Assessing Prospects for Eco-Industrialization through Small and Medium-Sized Enterprises in Developing Regions. *Sustainability* **2022**, *14*, 6898. [CrossRef]

43. Hezam, I.M.; Cavallaro, F.; Lakshmi, J.; Rani, P.; Goyal, S. Biofuel Production Plant Location Selection Using Integrated Picture Fuzzy Weighted Aggregated Sum Product Assessment Framework. *Sustainability* **2023**, *15*, 4215. [CrossRef]
44. Papamichael, I.; Pappas, G.; Siegel, J.E.; Zorpas, A.A. Unified waste metrics: A gamified tool in next-generation strategic planning. *Sci. Total Environ.* **2022**, *833*, 154835. [CrossRef]
45. Paul, S.; Ali, S.M.; Hasan, M.A.; Paul, S.K.; Kabir, G. Critical Success Factors for Supply Chain Sustainability in the Wood Industry: An Integrated PCA-ISM Model. *Sustainability* **2022**, *14*, 1863. [CrossRef]
46. Smol, M. Is the green deal a global strategy? Revision of the green deal definitions, strategies and importance in post-COVID recovery plans in various regions of the world. *Energy Policy* **2022**, *169*, 113152. [CrossRef]
47. Yeğin, T.; Ikram, M. Performance Evaluation of Green Furniture Brands in the Marketing 4.0 Period: An Integrated MCDM Approach. *Sustainability* **2022**, *14*, 10644. [CrossRef]