
Editorial

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Biographical notes: Marlen Gabriele Arnold holds the Chair of Corporate Environmental Management and Sustainability at the Technische Universität Chemnitz. Her core research areas focus on strategic environmental and sustainability management, concepts of sustainability-oriented innovations and change, inter- and transdisciplinary sustainability research including education for sustainable development. Her main goal is the investigation of possibilities for harmonising human, environment, technology and society through smart systems and structures as well as through a systemic and evolutionary lens.

Anne Fischer has been a Research Assistant at the Chair of Corporate Environmental Management and Sustainability at Technische Universität Chemnitz since 2017. Her current research fields are tiny house movement, social integration in Germany and BoP innovations in the context of sustainability. She teaches exercise courses for Bachelor's and Master's students in the subjects Sustainability Management, Business Administration and Basics of Corporate Environmental Management and is currently looking forward to qualify as PhD at Technische Universität Chemnitz.

The current age of the Anthropocene causes immense impacts on influencing biological, geological and atmospheric processes on Earth. In this Anthropocene era, there is a fundamental imbalance between the earth systems' capacities and socio-economic activities. Latter ones caused and still cause diverse challenges in multiple subsystems of society, such as transitions in energy, monetary and transport systems, regional and global value chains, digitalisation as well as environmental degradation, and social, financial and economic instability (Arnold, 2018). Sustainability progress is not easy to measure and determine, so, sustainability challenges strongly belong to the multidisciplinary interrelations and the trans- and interdisciplinary nature of solutions (Jones et al., 2017). Mind-opening and inspiring concepts as well as solutions of interdisciplinary and transdisciplinary progress towards sustainability are strongly needed. In light of transformations, fundamental and innovative short-term as well as long-term changes are needed in society, economy, technology and education, including behaviour and understandings as well as attitudes towards the usages of and interventions in the environment.

Addressing the Agenda 2030 and incorporating the UN sustainable development goals, businesses and organisations need creative and innovative approaches as well as circular and systemic solutions (Bocken et al., 2016; Arnold, 2017; Laurenti et al., 2016).

Progress towards sustainability is based on overcoming disciplinary and functional boundaries, connecting knowledge and value chains, fostering systemic thinking, overcoming barriers and existing mental frames or paradigms (Tura et al., 2019). Thus, creativity, innovation and sustainability are vital elements in societal and professional contexts and need to be considered interdependently. New combinations emerge when cultural and geographic borders are crossing. So, further learning on various levels of society and improvements in sustainable local development are needed (Rosca et al., 2016). Systems thinking and progress to sustainability include the consideration and addressing of all three sustainability strategies – sufficiency, efficiency and consistency – by policy, businesses, technology, consumption, and education. The central question is how sustainability progress can be integrated quickly in our daily life considering diverse cultures and global perspectives referring to a development towards sustainability. The eight papers in this special issue address inspiring issues of systemic thinking and challenges to progress towards sustainability. The following compilation of papers were part of the track Sustainability of the ARTEM OCC 2020 conference *Creativity, Innovation and Sustainability in the Age of Disruptions: Dealing with Global Challenges through Trans- and Interdisciplinary Approaches*.

The first paper ‘Old answers to new questions: using past disaster narratives to make today’s organisations more resilient to the challenges of the Anthropocene’ discusses the topics how organisational foresight can use disaster narratives from the past to learn and understand the way crises and disasters are created. Walter emphasises how to prepare for crises and deal with them in a very human and creative way.

In the second paper ‘The North-South divide in business leaders’ moral sentiment: a problem for global sustainability?’ Coldwell describes and explains how cultural factors impact on human moral values and sentiments. Therefore, he emphasises approaches of ecocentric and anthropocentric views to economic growth vs. environmental preservation. A crucial fact is the imbalance of certain aspects, as there are some aspects considered morally more important than others. Coldwell presents a heuristic how climate preservation targets could be set by deducing an exploratory climate preservation possibility curve.

The issue of imbalance, in particular the problems of poverty and social exclusion in the housing sector, are addressed in paper three. In her paper ‘Tiny houses as instruments for reducing poverty and promoting social integration in Germany’ Fischer discusses possible ways and barriers for the integration of tiny houses in Germany based on expert interviews. Drawing on case studies, the author identifies options to reduce specific problems related to homelessness in Germany and points out potentials for promoting social integration dynamics.

In their paper ‘Examining the social side of sustainability in the debate on business model innovations in the textile, clothing and fashion industry: a typology based on the value chain perspective’ Beyer and Arnold reflect the social aspects in the global textile value chains. Applying a systematic literature review this fourth paper makes obvious that current scholarly debates point to key social aspects, yet, fall short of their critical investigation, e.g., justice and degrowth are largely absent. The study develops a typology of further social sustainability-related aspects along the entire textile value chain.

The paper ‘The nature and extent of environmental sustainability advertising in magazines in a developing market’ by Ndlovu and Ellis addresses the interdependence of sustainable consumption and the potentials of sustainability advertising. In order to

behave and consume in more sustainable ways, the authors argue that consumers need to be knowledgeable not only of the problems, but also of various product and service solutions. The fifth paper gives recommendations for sustainability marketers, academics, and policymakers to place a sustainability message.

In the paper ‘An integrated conceptual model to secure digitally enabled smart grid towards sustainable energy’, Mbonye et al. highlight the importance of sustainable energy supply and the increasing need for access to electricity. The authors emphasise that smart grids are subject to various security threats that may cause major impairments. In this sixth paper, the authors accentuate issues related to the implementation of security initiatives and propose an integrated model for supporting smart grid stakeholders to overcome security threats.

The seventh paper ‘Sustainability management in non-governmental organisations: development of a maturity model’ focuses on sustainability management and its evaluation in NGOs using a maturity model. For its development, Albert et al. use a mixed-methods approach based on a systematic literature review, qualitative expert interviews, qualitative content analyses, quantitative questionnaires and a descriptive statistical data analysis. The authors identify a total of seven dimensions of sustainability management in NGOs and analyse the maturity level of sustainability management for 37 German NGOs.

Concerning social and economic transformation, Vogel and Breßler stress the major importance of Higher Education Institutions in their paper ‘The implementation of sustainability at universities: a study based on sustainable development goals’. In a quantitative study, the authors examine 467 higher education institutions from 76 countries. They conclude that the social SDGs are considered to a greater extent than the economic and ecologic goals. In this eighth paper, the authors argue for a possible link between the implementation of the SDGs and other factors at universities.

Although all papers in this Special Issue differ in terms of theoretical approaches, methodological design and industries or research focus, they all make clear: sustainability and progress towards sustainability is not easy to reach. Creative, innovative and systemic solutions addressing all sustainability areas and regions are necessary in order to face sustainability challenges and contribute to the Sustainable Development Goals. All authors raise ground-breaking questions for further research in order to progress towards sustainability.

As Special Issue editors, we thank the editors of *International Journal of Industry and Sustainable Development* for supporting this inspiring selection of papers under the topic of “Sustainability Multidisciplinary: Creativity, Innovation and Sustainability in the Age of Disruptions”.

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