Universität Augsburg — Centre for Climate Resilience

weizenbaum institut

DVPW

giz — Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

CALL FOR PAPERS

20th–22th September 2023

DIGITALIZATION FOR SUSTAINABILITY TRANSFORMATIONS: CRITICAL PERSPECTIVES, LESSONS LEARNED, AND FUTURE PROSPECTS

An international, interdisciplinary academic conference hosted by the University of Augsburg (Germany) in collaboration with the Weizenbaum Institute for the Networked Society, the German Corporation for International Cooperation (GIZ), and the German Political Science Association (DVPW)

PLACE

Centre for Climate Resilience, University of Augsburg (near Munich), Germany

DATE & TIME

20 September 2023, 3 pm to 22 September 2023, 1 pm
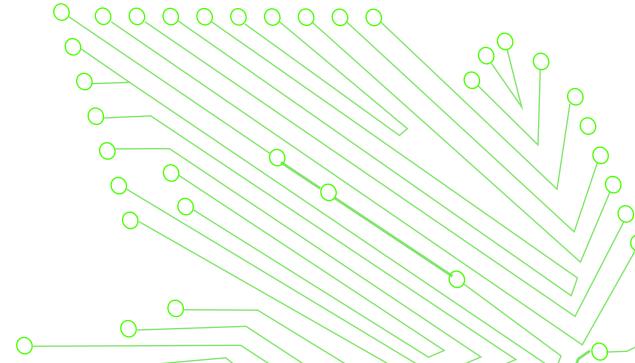
GUIDING QUESTIONS

Digitalization and sustainability transformation are two of the most significant challenges facing the world today. However, the links between these topics have rarely been addressed from an interdisciplinary perspective. This conference aims to bring together digitalization and sustainability scholars for a vibrant exchange across disciplinary boundaries.

In the face of massive global environmental and sustainability challenges, the potential of digital technologies to foster sustainable development has received increasing attention in recent years. However, the extent to which digitalization (including big data and artificial intelligence) can contribute to solving the world's most pressing sustainability problems, ranging from biodiversity loss to the climate crisis and persistent pollution, remains an open question.

How digitalization can contribute to sustainable development is not just a technological question. It also depends on how the development and use of digital technologies is governed and socially embedded. Further, there is a risk of digital innovations perpetuating the status quo or inhibiting sustainability transformations instead of facilitating change towards sustainable development. These observations serve as starting points for exploring the changing knowledge base and real-world practices that impact sustainability politics and governance in times of digitalization.

The two overarching research questions of this conference are as follows:

\ How does digitalization transform the knowledge and practices of environmental and sustainability policymaking?

\ Which forms of digitalization governance are needed to harness its potential for sustainability transformations?

KEYNOTE SPEAKERS

Planning a Just Transition from Coal in India: Digitisation of Data and the Possibility of Subversions in Mineral Resource Governance

Ph.D. Radhika Krishnan is an Assistant Professor with the Human Sciences Research Group, IIIT Hyderabad, India. She has been working in the broad domain of political ecology and technology studies for the past two decades. An electrical engineer by training, her interest in studying the interface between technological regimes, local communities and ecologies led her to shift her research focus to the social sciences. During her tenure at IIIT she has been working on the ways in which digital tools can be integrated into research on issues around mineral extractions, specifically coal. Currently she is collaborating with colleagues from Sweden, Australia and the UK on two projects on 'Just Transitions' in India.

Algorithmic Climate Governance: Reproducing hegemony or radical transformation?

Dr. Ruth Machen is a Lecturer in Urban Planning at Newcastle University (UK), researching the political implications of digital technologies in climate change governance. A human geographer by background, with former policy experience, her work draws from empirical research in the UK and USA on the use of digital models, platforms and interfaces in the making of climate policy. Focusing on unpacking the politics of knowledge at the climate science-policy interface, she draws from environmental governance scholarship, postfoundational political theory, and critical digital scholarship in human geography and STS. She has also contributed to debates on research impact and the role of critical scholarship in societal transformations.

Sustainability imaginaries by design

Dr. Roy Bendor explores the capacity of design to disclose alternative social, political and environmental futures. With a background is in media studies, philosophy of technology, and environmental communication, he is currently Assistant Professor of Critical Design at the Faculty of Industrial Design Engineering at Delft University of Technology (Netherlands). Roy is also Fellow of the Urban Futures Studio at Utrecht University, former editor of the sustainability forum in the ACM's magazine Interactions, and author of Interactive Media for Sustainability (Palgrave, 2018).

Digital futures with civic tech initiatives and their relationship with narratives on environmental issues and civic participation

Ph.D. Teresa Cerratto Pargman is a Human-Computer Interaction (HCI) professor at the Dept. of Computer and Systems Sciences at Stockholm University (SU). With a background in Psychology, Pedagogy, and Cognitive Science, she conducts conceptual and empirical studies on emerging technologies and practices in the public sector drawing from perspectives on the philosophy of technology and science and technology studies. She is interested in contributing methodologically to studying digital transformation for a sustainable planet. Teresa is a member of the Executive Committee and Associate Director of Societal Outreach at Digital Futures in Sweden.

CALL FOR PAPERS

We welcome disciplinary diversity and invite theoretical, empirical, and methodological contributions dealing with, but not limited to, the five main themes of the conference:

1. Understandings of the digitalization–sustainability nexus

How is sustainability understood and discussed in the context of digitalization? What notions of digitalization exist in the field of environmental sustainability? What understandings of both concepts have emerged to tackle so-called (super-)wicked sustainability problems? What are the policy implications of these different framings, narratives, and discourses? How is the nexus between digitalization and sustainability made "governable"?

2. Analysing the actors, discourses, and politics of the digitalization–sustainability nexus

Which actors drive the discourse on digital transformation and sustainability, and how has this changed over time? What are the prevailing interests and discourse/ actor coalitions? Are there patterns of coloniality? How and to what extent are issues of digital transformation and sustainability contested and politicized but also normalized and depoliticized? How is technology framed in the debate around digitalization and sustainability? How and why are certain technological solutions featured and mainstreamed while others – especially social innovations – are marginalized?

3. Designing digitalization policies and technology to foster sustainability

What digital solutions have been proposed and for which sustainability challenges? What forms of data governance are needed for sustainable development? How can human-centred design enable sustainability transformations? How does and should regulation influence sustainable technology design? Which policies at the digitalization–sustainability nexus have been adopted by political actors, how have they evolved, and what outcomes do they deliver? How can digital transformation be achieved while respecting social welfare, the limits of the planet, and the need for democratic participation? What differences in policies and outcomes can be observed in different countries around the world, and how can these differences be explained?

4. Studying polity, power, institutions, and decision-making procedures

How do the use of digital technologies and the data resulting from it change decision-making practices in the field of ecological sustainability policy? Which sites and procedures govern the nexus between digitalization and sustainability? Which power structures (e.g. monopolies) hinder or enable decision-making at the interface between digitalization and sustainability? What kinds of power relations are inherent in the design of digital technologies? To what extent are patterns of territorial and structural coloniality and extractivism at work? What is the potential for democratizing decision-making processes (e.g. through social innovations or civic tech solutions)? Which new legal and organizational forms may allow civil society to participate in political decision-making?

5. Using digital methods to understand sustainability transformations

How can digital and AI-based social science methods enhance our understanding of sustainability transformations? How can digital technologies be used to gather, analyse, and interpret data on sustainability and governance? What are the technological and epistemological limitations of digital methods? How can these methods be made available to and benefit people in the Global South and the Global North?

HOW TO APPLY

SUBMISSION

We invite scholars from a variety of disciplines, including political science, sociology, science and technology studies (STS), communication and media studies, human geography, law, philosophy, computer sciences, design research, and related disciplines to present their research at this conference. Abstracts of 350–400 words should be submitted along with the complete contact information of the authors (full name, position, institutional affiliation(s), e-mail) here:
https://cloud.weizenbaum-institut.de/apps/forms/RpWq9bPwZwHcdkfY

DEADLINE

Deadline for abstract submission: 30 April 2023
Acceptance notifications will be sent out before the end of May.

CONTACT

If you have questions about the conference, please e-mail digital@ccr.uni-augsburg.de.

Main organizer and local host: Prof. Dr. Angela Oels, Centre for Climate Resilience, University of Augsburg, Germany

PROGRAMME COMMITTEE

Working Group for Digitalization and Politics, German Association for Political Science, DVPW

\ Prof. Dr. Angela Oels, University of Augsburg, Germany
\ Dr. Pascal König, German Corporation for International Collaboration (GIZ), Eschborn, Germany
\ Florian Steig, University of Vienna, Austria

Working Group for Environmental Politics/Global Change, German Association for Political Science, DVPW

\ Dr. Jens Marquardt, Technical University of Darmstadt, Germany
\ Prof. Dr. Sabine Weiland, Université Catholique de Lille, France

Working Group for Energy Transformation, German Association for Political Science, DVPW

\ Dr. Jörg Radtke, Research Institute for Sustainability - Helmholtz Centre Potsdam, Germany

Research Group "Digitalization, Sustainability and Participation"

\ Dr. Andrea Hamm, Weizenbaum Institut e.V., Berlin, Germany
\ Rainer Rehak, Weizenbaum Institut e.V., Berlin, Germany