

## 14<sup>th</sup> IST conference 2023 Responsibility and reflexivity in transitions

Copernicus Institute of Sustainable Development Utrecht, the Netherlands

30<sup>th</sup> August - 1<sup>st</sup> September 2023

# **Program**



Pathways to Sustainability









### 1. Welcome

We are excited to welcome you to Utrecht for the 14th annual International Sustainability Transitions conference. The excitement originates first and foremost from the fact that we are eager to see all of you - newcomers and old hands in the community - in-person. The previous editions of IST in Vienna, Karlsruhe and Cape Town/Melbourne/Georgetown did a tremendous job in organizing the conference, catering to a wide and global audience in times of a pandemic. We hope that getting back in person gives us the chance to strengthen our professional and social connections even more. A second reason for excitement is that this year's conference theme, 'Responsibility and Reflexivity in Transitions', hopefully triggers many interesting discussions, during drinks, over dinner or during sessions. The theme is highly relevant, as we as a community are starting to become even more engaged in transitions and changes that are actually happening and speeding up, which generates new questions about transitions, but also forces us to think about how we need to position ourselves, as researchers and as a community. Finally, we are excited to welcome you because we are eager to present to you all the talent and variety that the program of the conference represents: we have exciting keynotes, art installations, a wide range of full paper presentations, speed talks and posters, and many more. We hope you will enjoy and get inspired.

Best wishes,

The IST 2023 conference chairs

Adriaan van der Loos Simona Negro Wouter Boon The IST 2023 Organizing Committee:

Abe Hendriks
Adriaan van der Loos
Harm van den Heiligenberg
Ilaria Flisi
Laura van Oers
Laura Piscicelli
Lisa Bettoni
Matthijs Mouthaan
Mayte Beekman
Nikhil John
Paula Schipper
Sabine de Graaff
Simona Negro
Toon Meelen





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### 2. IST 2023: Responsibility and reflexivity in transitions

This year's conference theme is 'Responsibility and Reflexivity in Transitions'. As the first in-person conference in 3 years, this gathering constitutes a special and important moment of reflection for our community.

The multi-faceted challenges facing the global community necessitate a deep reflection on just sustainability transitions. Coming off the heels of the peak of the COVID-19 pandemic, the climate crisis, energy security and resource scarcity have become extraordinarily intertwined, affecting all aspects of life and all facets of sustainability transitions — from food accessibility to droughts to transportation – and ranging from the world's wealthiest countries to those hardest hit. However, these challenges may lead to competing priorities. While we see record deployment of solar and wind energy technologies, countries are also reactivating coal and a debate has been reinvigorated about the role of nuclear power in the energy mix. Community-supported agriculture and agroecology continue to grow whilst vast quantities of industrially produced grain are stimulated to supply basic global food needs. In this time of upheaval, we may indeed have an opportunity to make changes that were thus far locked out. Do we now go back to 'normal'? Do we make room for change? If so, how? How do we encourage and safeguard the time and space to critically reflect on deeply held assumptions about how our societies could or should function while being confronted with a sense of urgency?

This conference's theme encourages not just a reflection on such changes and the responsibility we must take to ensure that any transition is a just transition, but also on what the role of reflection actually is and could be in such debates. How can we better understand the responsibility of actor groups in transition processes? Which responsibilities do we ourselves have as a research community? How do we reflect on deeply held societal norms and practices within and outside of academia that stimulate or impede transitions?

Furthermore, responsibility and reflexivity are not only the purvey of the academic community, preaching from the so-called ivory tower. A responsible and reflexive transition pertains equally to civil society, the government, industry & business actors and many more. Hence, meaningful engagement remains critical. As academics, we see many new formats and techniques emerging to engage with practitioners and civil society, such as action research and knowledge co-production. Innovative approaches to education and interaction have emerged, for example, through the massive upscaling of digital platforms and use of game-based educational programs.

To reflect on these innovative approaches, the conference program covers many interactive and engaging platforms for discussion in addition to classic full paper, speed-talk, dialog, plenary and poster sessions. The many dialogue sessions cover the conference theme, reflecting on e.g., justice, unsustainability and moving beyond dominant paradigms.

There are also other notable parts of the program that prominently feature the conference theme. First, we are introducing a conference-wide 'Reflexivity workshop' during the keynote slot on Friday to spark a reflection on responsibility and reflexivity. Second, we propose to look into the future at a time of turbulence. What are the emerging trends, who is responsible, what are the built-in corrective mechanisms, what are the key tensions at play, how do we make these transitions a reality? To do so, there will be a variety of workshops, a photo exhibition and art installations, many of which were designed in collaboration with Utrecht University's Urban Futures Studio to engage with techniques of imaginaries. Furthermore, we will be engaging with local and regional stakeholders to discuss how transitions are happening on the ground in the city and region of Utrecht. This will take the form of a science-policy debate on regional transitions on Wednesday.

### 3. Copernicus Institute of Sustainable Development

Established in 1636, Utrecht University has a long history and is rich in tradition. The history of Utrecht University is reflected in the buildings, gardens and street names across the city.

The Copernicus Institute of Sustainable Development is a vibrant international research community that aims to help accelerate the transition to a sustainable and just society. The Copernicus Institute does this through the development of excellent and relevant knowledge, collaborating with citizens, politicians, policymakers, NGOs, and firms to learn from each other and influence decision-making, and by educating the change agents of the future.

While the Copernicus Institute is the only department at Utrecht University that solely focuses on sustainability research, this is a key topic for Utrecht University in general. Notably, the Strategic Theme Pathways to Sustainability strengthens our collaboration with many other groups across the university.





Copernicus Institute of Sustainable Development

### 4. STRN

The Sustainability Transitions Research Network (STRN) is the international network of scholars interested in sustainability transitions. Since its foundation in 2009, STRN has grown into a community of more than 3000 international researchers from various disciplines and produces more than 500 publications in specialized journals every year. IST is the flagship event of the international transitions research community and is organized annually by different partners on behalf of STRN. The research network and the annual conference address the question of how the transition to sustainability can succeed through coevolutionary changes and innovations in socio-technical systems.



### 5. Supporters

IST has received support from the Province of Utrecht. The province's goal is to be climate neutral (CO2 neutral) by 2050 and has an ambitious plan in place called the 'Energy Transition Program Plan 2020-2025' that describes how we will work on this in the first few years. Huib van Essen, regional Minister of the province of Utrecht, The Netherlands, will share some words of welcome during the opening. We will also have a science-policy debate on regional transitions.

IST has also received support from 'Pathways to Sustainability', one of the cross-cutting strategic themes at Utrecht University. Pathways to Sustainability is convinced that our university has a special role to play with regards to the sustainability crisis, which is amongst the biggest challenges society faces in the 21st century. Being the home to groups of top academics in a range of fields of sustainability research, Utrecht University now wants to take the next step. We want to create the spirit that will stimulate us to collaborate across the disciplines and in collaboration with societal stakeholders on research and education to establish pathways to sustainability.



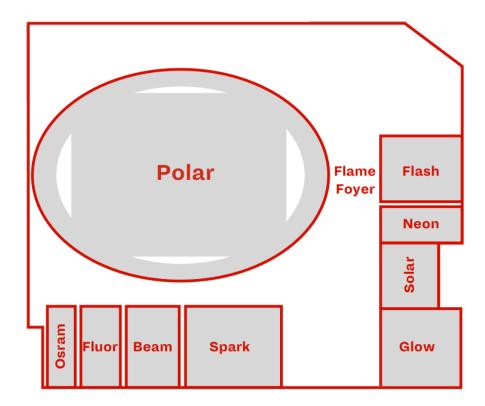
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### 6. Jaarbeurs (Media Plaza) - conference venue

The conference will take place at Jaarbeurs and, more specifically, in the conference area called Media Plaza. Media Plaza aims at giving guests a creative energy boost, and it can be divided into two areas: the Polar area and the Auditorium.

All lunches are vegan/vegetarian finger food and served in the Flame foyer.



### How to get there

Address: Jaarbeursplein, 3521 AL Utrecht

#### Getting to Jaarbeurs by public transport

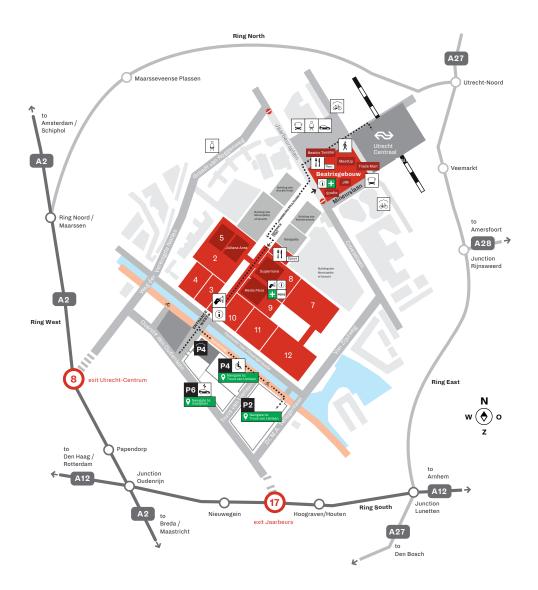
Jaarbeurs can easily be accessed using public transport. The venues are right next to Utrecht Central Station and all buses and trams stop at 'Jaarbeursplein'. By train, travel to Utrecht Central Station, then from the station follow the signs 'Jaarbeursplein'. Before you leave, plan your trip and check the current travel times and detailed information at <u>9292.nl</u> or the 9292 mobile app.

#### Getting to Jaarbeurs by foot and bike

Jaarbeurs is a few minutes' walk from Utrecht city center and Utrecht Central Station. There are bicycle racks very close to the entrance.

#### Getting to Jaarbeurs by car

For more information on getting to Jaarbeurs by car, please see the information provided here.





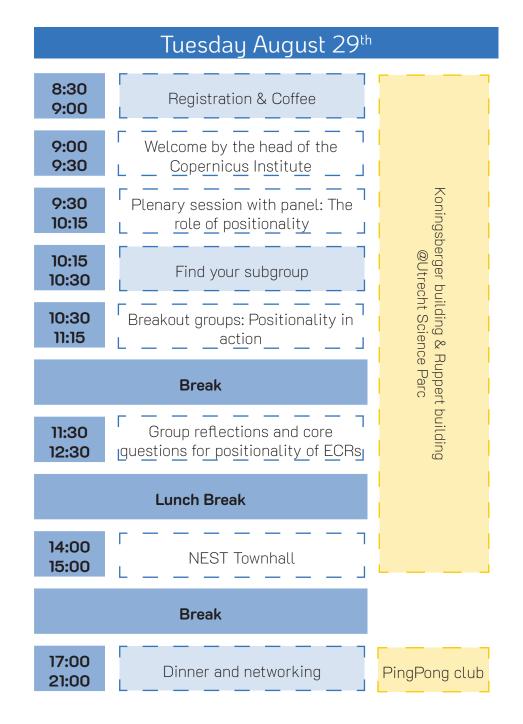
### 7. ECR event

### IST-ECR Day Positionality in Research: Navigating Sustainability Transition Research

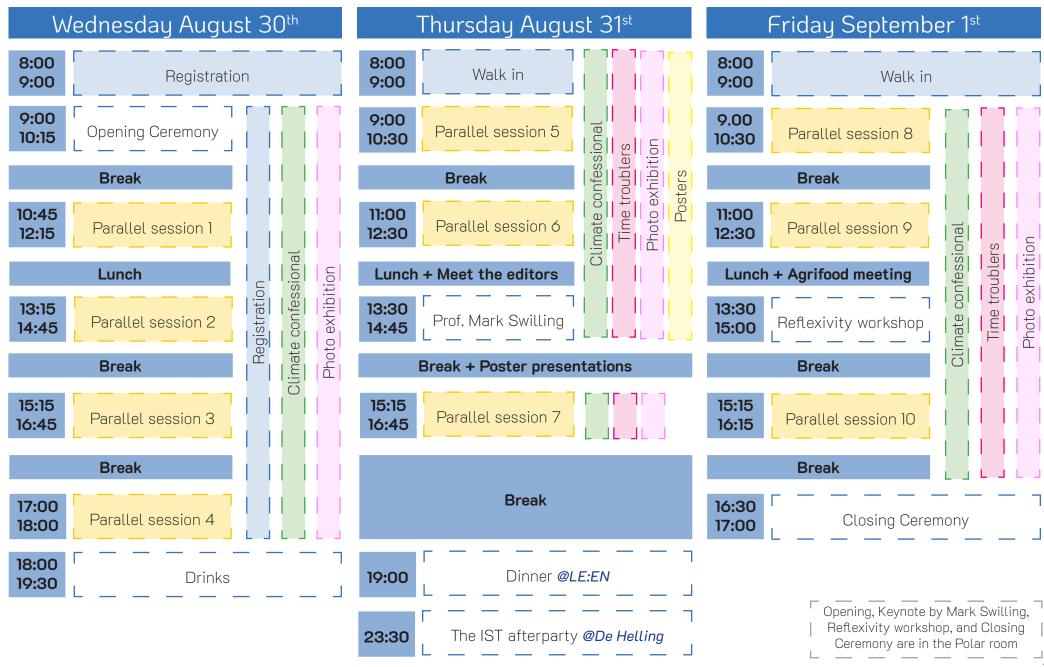
This workshop is designed for early career researchers and PhD students interested in understanding and reflecting on their positionality in sustainability transition research. The workshop is organized by the Network for early career researchers in Sustainability Transitions (NEST). Several STRN and Utrecht University scholars will join the event and engage with early career researchers to collectively reflect on how positionality and the ways in which our identities, experiences, and social locations shape our perspectives, assumptions, and biases in research. In this workshop, participants will learn about the concept of positionality and explore how it manifests in their own research. The workshop will consist of a plenary session, breakout groups, and personal discussions to delve into the complexities of positionality in research.

The workshop will be guided by Julia Wittmayer, Katharina Schiller, Mapula Tshangela, Flor Avelino, Wisdom Kanda, Kristina Bogner, Simona Negro, Wouter Boon and Laura Piscicelli.

Organizing team: Mayte Beekman, Sabine de Graaff, Abe Hendriks, Nikhil John and Matthijs Mouthaan



### 8. Conference Program



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### 9. Prof. Mark Swilling

Mark Swilling is Distinguished Professor of Sustainable Development in the Centre for Sustainability Transitions (CST) in the Faculty of Economic and Management Sciences, University of Stellenbosch and Co-Director of CST; as of September 2021, he is also a Visiting Research Professor at the Environmental Justice Programme, Georgetown University, Washington D.C.

As a UNU-WIDER Non-Resident Senior Research Fellow, Professor Swilling is involved in the Southern Africa — Towards Inclusive Economic Development —programme. Specifically, he is co-organizing the project's sub-component on food, energy, and water in a context of climate change.

His latest book is The Age of Sustainability: Just Transitions in a Complex World, London and New York: Routledge, 2020. He also co-authored with Eve Annecke Just Transitions: Explorations of Sustainability in an Unfair World, Tokyo: United Nations University Press, 2012, co-edited with Adriana Allen and Andreas Lampis Untamed Urbanism, New York and London: Routledge, 2016, co-edited with Josephine Musango and Jeremy Wakeford Greening the South African Economy, Cape Town: Juta, 2016 and was the lead author with Ivor Chipkin et. al. of Shadow State: Politics of State Capture, Johannesburg: WITS Press, 2018.

He is a member of UNEP's International Resource Panel acting as Coordinator of the Cities Working Group and co-lead author of The Weight of Cities: Resource Requirements of Future Urbanization, published in 2018. He is the Chairperson of the Board of the Development Bank of Southern Africa and in late 2021 was appointed by the President of South Africa as a member of the National Planning Commission.

He has been a Visiting Professor at the Universities of Sheffield and Utrecht, and in 2018 was the Edward P. Bass Visiting Environmental Scholar at Yale University. As of 2021 he had published 20 books, 84 book chapters, 64 peer reviewed articles, 50 reports and delivered 126 presentations.



### 10. Reflexivity workshop

In this reflective dialogue, we want to engage in a conversation with the transitions community at IST. The theme of this year's conference is "Responsibility & reflexivity in transitions", which urges us to reflect as a community on our own role and responsibility as transitions researchers (community). Facing several societal challenges which only increase in urgency, with the climate crisis as the most fundamental, what should our role be as transitions researchers and educators in addressing these challenges? What responsibilities do we have to take, and how does this translate to our research practices, our community organization and our institution's organizational structures?

The goal of this session is to reflect on these questions together and showcase the diversity of positions and approaches that exist within the transitions community. Rather than focusing on differences and contradictions, we want to engage in a constructive and meaningful conversation, learn from each other's perspectives and showcase the different possibilities of contributing to change.

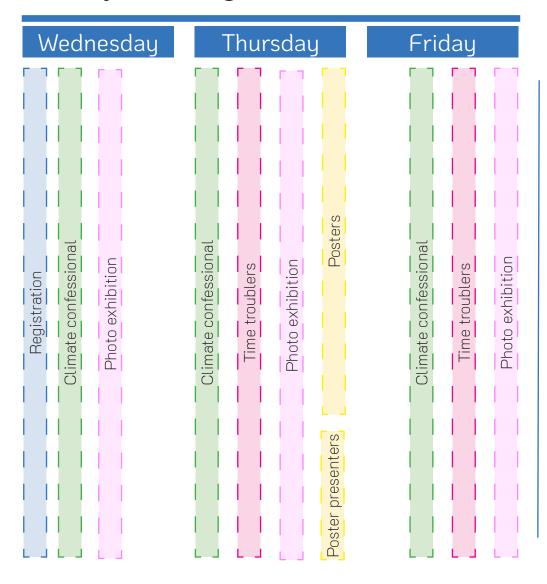
The session will take an interactive form, in which we will reflect collectively through multiple rounds of conversations, guided by our moderators Josie Chambers and Frank Kupper.

**Organizers**: Mayte Beekman, Kristina Bogner, Josie Chambers, Sabine de Graaff and Frank Kupper, supported by Wouter Boon, Esther Jansen, Nikhil John, Matthijs Mouthaan, Laura van Oers, Aline Scherrer and Paula Schipper





### 11. Foyer Program



#### Climate confessional

Climate confessional is an interactive performance that invites you to explore the role of subjectivity in climate science.

As someone versed in climate change science, what keeps you up at night?

What thoughts do you withhold from your colleagues so as to not discredit your academic standing?

If you could rewrite the rules of academic funding, what kinds of research would you really be doing?

Repurposing the space of a confessional booth, we invite you to help us plot out the emotional range of climate science, so as to consider the thoughts and emotions that lie below the surface of objective climate discourse.

In 2022 Ekaterina Volkova and Julien Thomas participated in the Imagining Low-Carbon Futures artist residency, a project of PhD candidate Lisette van Beek at the Urban Futures Studio. They continue their collaboration with the Studio during their current residency at the Jan van Eyck Academie in Maastricht, where they explore clouds as social and scientific focal points of climate change discourse and action.

#### Time troublers

Please join us for an intimate gathering with temporal agents who traveled from the past and the future to meet us in Utrecht: a former farmer and famous politician who radically changed Europe's countryside, a 200,000 year old piece of rock, a multilingual black-tailed godwit, and various voices from the present and future who share their stories of sacrifice and hope. Let yourself be heard and help us, to paraphrase physicist Karen Barad, to trouble time in these troubling times. How can we navigate temporal tensions, for example between the short term need to build thousands of new homes in low-lying areas, and the long term threat of rising sea levels? Can we create collective imaginaries that challenge and change dominant conceptions of temporality that take progress as inevitable? Let's listen to what the rock has to say about where and how we will live in the future. And what will you tell the oil executive who announces the company's plans to invest in carbon neutral cities?

This theatrical journey and conversation across time and space was conceptualized by practice for cultural transformation Loom together with scenography studio Marloes & Wikke and was commissioned by and developed in close collaboration with the Urban Futures Studio at Utrecht University and many others.

#### Poster presentations

This year, we will have our poster session in the central Flame Foyer mingling area. The poster session is an opportunity for researchers to showcase their emerging work. We will have over 40 posters covering a diverse range of sustainability transitions topics. The posters will be up all day on Thursday, August 30th and you will have a chance to speak with the presenters during the afternoon coffee break. There will be a best poster award, voted upon by the community. Don't forget to vote!



# Raphael Belmin 30 August to 01 September 2023 IST Conference Utrecht, Netherlands Focus on agroecological Transitions







n Africa

#### Photo exhibition

African agriculture has undergone major transformations since the beginning of the 20th century. With the aim of exporting raw materials and feeding a growing population, African governments and the international community have actively supported a process of intensification in agriculture and livestock farming.

But conventional agriculture is now showing its limitations. It contributes to the destruction of biodiversity and natural resources, affecting production and the quality of life of rural populations. It also entails economic and health risks for farmers and consumers, making them dependent on chemical inputs and imported food products.

Agroecology proposes an alternative agricultural and food model, based on a humbler relationship with living things. Agroecology promotes diversified family farming, adapted to each territory and respectful of local knowledge and ecosystems. Combining science, agricultural practices and social movements, agroecology commits us to a sustainable, innovative and forward-looking agriculture.

This photo exhibition puts the spotlight on the actors working towards an agroecological transition in Africa. The images taken in various countries (Senegal, Côte d'Ivoire, Burkina Faso, Kenya) document the practices of farmers, development agents, researchers and rural leaders who are taking action to build more balanced agricultural and food systems.

Researcher-photographer Raphael Belmin, author of the images in this exhibition, has been documenting the daily lives of African agroecology pioneers since 2010. He uses photography in synergy with action research to examine the imbalances affecting African agriculture, and to document the ongoing agroecological transition.

#### 12. Social events

#### Wednesday afternoon drinks

Drinks are sponsored by the Province of Utrecht to allow interaction between scientists and local policy makers

#### Dinner @LE:EN

LE:EN is one of Utrechts' favourite Asian fusion restaurant in an old industrial building; the restaurant and outside area are exclusively reserved for IST conference members; a vegetarian/vegan Asian fusion buffet will be served. Drinks will be paid for by IST until 22:00.

From the conference location it is a 20-30 minutes walk along the Merwedekanaal (see google maps for instructions).

Otherwise there are several busses departing from the Central Station. Or trains that stop at Vaartsche Rijn station, which is only a few minutes walk towards the restaurant.

Link, LE:EN, Heuveloord 140, 3523 CK Utrecht

#### The IST afterparty @De Helling

De Helling is one of Utrechts most popular music and concert venues The IST 2023 party will be hosted there, free entrance, with DJ performances by our own IST colleagues from Copernicus (DJ B.R.E), SPRU (Michael Hopkins) and Berlin (druisnoise LIVE set) –

You don't want to miss this epic party!!

De Helling is located 5 minutes walk from the restaurant. The whole Heuveloord area is a nice and vibrant area to go out for food and drinks.

Link, De Helling, Helling 7, 3523 CB Utrecht

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### 13. About Utrecht

Utrecht is a historic city with intact Medieval buildings. It has been an important center of Christianity since the 8th century and was actually the most important city for hundreds of years. During the Dutch Golden Age, this honor was passed onto Amsterdam and the capital city's prominence has remained ever since.

On a day visiting the sites of Utrecht, there are more Medieval churches than you could possibly count. The famous Dom tower is the focal point of Utrecht, right in the heart of the city center. It was once connected to the cathedral of Saint Martin, but that portion of the building was damaged and never rebuilt - which is why, nowadays, the tower stands all by itself, overlooking the city and its surrounding areas.

Utrecht is a beautiful, dynamic little city (the fourth per size in the Netherlands) with much to offer. Although often likened to other Dutch cities, especially Amsterdam, Utrecht has its very own unique character and remains popular with tourists, but to a less overwhelming degree.

More info about the city can be found here.

#### Fun activities include:

- Canoeing and kayak the canals
- Climbing the Dom Tower
- Dom Under (relics of Utrecht)
- Walk around the old city
- Saturday market (Vredenburg Plein)
- Linen market on Saturday
- Rent a bike and explore
- Museums
  - Central museum
  - Botanical gardens
  - University museum

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### 14. Lunch meetings

#### Meet-the-EIST-editors

On Thursday 31st of August, 12:45-13:30, a meet the editors session will take place in the Spark room.

The editorial team of the journal EIST will be available for discussing its editorial strategy as well as on academic publishing, in general. We will first provide a short insight into our "machine-room" in terms of editorial structures and practices and then provide opportunities to ask questions about how to write "successful" papers, expectations on reviewers, how to propose a convincing Special Issue proposal and the like.

**Organizers**: Bernhard Truffer (editor-in-chief); Floor Alkemade, Luis Carvalho, Lars Coenen, Giuseppe Feola, Paula Kivimaa, Rob Raven (associate editors) Wisdom Kanda (junior associate editor)

#### Agrifood Thematich Group (AFTG)

On Friday 1st of September, 12:45-13:30, a session about the STRN Agrifood group will take place in the Spark room.

One of the thematic groups within STRN deals with agro-food transitions. With a small group we have developed some plans for activities in the coming year, including organising an international workshop on agro-food transitions to be held in 2024. We would like to discuss these plans with those interested.

**Organizers**: Boelie Elzen (Wageningen UR, Netherlands) and Marc Barbier (INRAE, France)

### 15. Day by day program

### Legend

All of the sessions are color coded by conference track.

1) Conference track

2) Understanding transitions

3) Methodologies for transition research

4) Governing transitions

5) Organizations and industries in transitions

6) Politics, power and policy in transition

7) Movements, culture and civil society

8) Transitions in practice and everyday life

9) Geography of transitions

10) Ethical aspects of transitions

11) Open track



# Wednesday August 30th

	Parallel session 1 - 10:45 - 12:15	Parallel session 2 - 13:15 - 14:45	Parallel session 3 - 15:15 - 16:45	Parallel session 4 - 17:00 - 18:00
Polar	<b>Dialogue 1:</b> Just Sustainability Transitions	<b>Dialogue 2:</b> Enabling just transition? A call for reflexive dialogue on just transition research	<b>Dialogue 3:</b> Science-Policy debate regional transitions	Session 9.3: Speed talks
1 ocai	Session 10.1: Energy Justice	Session 10.3: Equity		
Flash	Session 1.1: Visions	Session 1.3: Reflexivity & Transitions	Session 1.5: Futures and Scenarios	Session 1.7: Speed talks
Neon	Session 1.2: Speed talks	Session 1.4: Organizing sustainability transitions	Session 1.6: Monitoring and measuring	Session 2.5: Speed talks
Solar	Session 2.1: Tipping points	Session 2.3: Speed and direction	Session 2.4: Governing Missions	Session 4.3: Speed talks
Glow	Session 2.2: Speed talks	Session 4.2: Phase out	Session 5.2: Firm reorientation	Session 5.3: Niches and social innovation
Beam	Session 3.1: Transitions in the making (I)	Session 6.1: Policy mixes	Session 6.2: Directionality	Session 6.4: Speed talks
Fluor	Session 4.1: Transition initiatives	Session 8.1: Transitions in the making (II)	Session 6.3: Futures	Session 8.2: Roles and habits
Osram	Session 5.1: Destabilization and decline (I)	Session 9.1: Place-making from a transition perspective	Session 7.1: Fragmentation and transboundary transitiosn	Session 8.3: Speed talks
Spark	Session 11.1: Musical transformations	Session 10.2: Reconfiguring energy transitions to achieve justice	Session 9.2: Innovation processes	Session 9.4: Transnational geographies

# Thursday August 31st

	Parallel session 5 - 9:00 - 10:30	Parallel session 6 - 11:00 - 12:30	Parallel session 7 - 15:15 - 16:45
Polar	<b>Dialogue 4:</b> Combining Reflexivity and Action – Lessons from Transformative Research and Practice	<b>Dialogue 6:</b> Critical reflections on innovations in transitions studies	<b>Dialogue 8:</b> Integrated problem solving in transdisciplinary transition research
	<b>Dialogue 5:</b> Discussing the diversity of Qualitative Research Designs in Transition Research	<b>Dialogue 7:</b> Dramaturgies of Change: the conference installations and the theory of change they represent	<b>Dialogue 9:</b> Varieties of economies in cities: moving beyond growth-oriented economic paradigms
Flash	Session 1.8: Understanding security and geopolitics in the context of sustainability transitions	Session 1.9: Impact	Session 1.10: Environmental Politics
Neon	Session 2.6: Speed talks	Session 2.7: Digitalisation	Session 2.8: Transformative, radical and disruptive innovation
Solar	Session 4.4: Local government	Session 3.2: Speed talks	Session 2.9: Incumbents
Glow	Session 5.4: Agrifood transitions	Session 4.5: Speed talks	Session 3.3: Energy scenarios
Beam	Session 5.5: Circular transitions	Session 5.6: Speed talks	Session 6.6: Policy mixes (II)
Fluor	Session 6.5: Governments	Session 8.4: Technologies and Society	Session 7.3: Speed talks
Osram	Session 7.2: Social movements	Session 10.5: Narratives	Session 9.5: Context and space
Spark	Session 10.4: Speed talks	Session 11.2: Behaviour in transitions: From perception to action	Session 10.6: Just transitions (I)

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# Friday September 1st

	Parallel session 8 - 9:00 - 10:30	Parallel session 9 - 11:00 - 12:30	Parallel session 10 - 15:15 - 16:15
Polar	<b>Dialogue 10:</b> Transitions of the agro-food system: fostering system innovation and destabilize the existing regime	<b>Dialogue 12:</b> Power to the People: Navigating Energy Communities' Quest for Justice and Equity	
	<b>Dialogue 11:</b> Stimulating and institutionalizing reflexivity at the boundaries of change initiative and context	<b>Dialogue 13:</b> Unsustainabilities: an adjacent research agenda	
Flash	Session 1.11: Speed talks	Session 1.13: Mobility and transport	Session 1.14: Research organizations
Neon	Session 1.12: Multi-sector interactions	Session 4.9: Urban transitions and policy	Session 5.10: Speed talks
Solar	Session 4.6: Expectation and governance	Session 4.10: Learning	Session 6.7: Speed talks
Glow	Session 4.7: Speed talks	Session 4.11: Unboxing the concept of intermediaries for steering transformative change	Session 6.8: Speed talks
Beam	Session 4.8: Speed talks	Session 5.8: Agrifood transitions (II)	Session 7.4: Speed talks
Fluor	Session 5.7: Destabilisation and decline (II)	Session 5.9: Speed talks	Session 8.5: Speed talks
Osram	Session 10.7: Just transitions (II)	Session 9.6: Regional contexts	Session 9.8: Speed talks
Spark	Session 11.3: Conceptualizing the role of finance for sustainability transitions	Session 9.7: Regional context (II)	

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### Poster presentations

(128) Revealing social representations change through information systems: a first application on milk sector in France

Sanae Boukhriss, Marie Dervillé and Marie-Benoit Magrini

(883) Ontological and systemic transformations in biodiversity governance

Mara de Pater

(1147) What happens after you get the certificate?": Tracing the everyday realities of local farmers associated with the organic certification scheme in Uttarakhand, India

Sadaf Javed

(1350) Shaping transitions towards sustainable work: the sustainability impact of working from home

Linda Ghirardello, Barbara Praetorius, Tobias Börger and Gerrit von Jorck

(1523) The formation of technological innovation systems

Harold Paredes-Frigolett, Lea Stöber, Andreas Pyka and Bo Carlsson

(1671) Exploring Notions of Just Transition in Coal Mining Regions: A Comparative Analysis of International Development Organizations' imaginaries

Alexandra Krumm

(1826) Innovation pathways of local energy communities for novel renewable energy infrastructures and -markets

Florian Lukas Helfrich

(1906) Changing institutions in the public sector through transformative innovation

Alicia Soto

(2388) Reaping the rooftop potential: assessing transaction costs for customers acquiring solar PV systems

Sofie Sandin Lompar and Lena Neij

(2866) Sensing for Sustainability: How Farmers Engage in Sensing Practices in the Transition to Ecology-Based Farming

Lenn Gorissen, Kornelia Konrad and Esther Turnhout

(3693) Creating learning spaces for researchers within interdisciplinary research projects

Katharina Biely

(4025) Translocal multi-stakeholder reflexive learning for urban food system transformation; developing an approach while doing it Jonathan Luger, Barbara Regeer and Marjoleine van der Meij

(4106) Knowledge sharing and co-creation in a resource-constrained environment: A case of socialization and learning dynamics of local farmers to manage their everyday water needs in the parched Bundelkhand region of India

Birendra Singh

**(4123)** Sustainable digital education at higher education institutions Özge Okur, Morris Huang and Yilin Huang

(4147) Devising a framework to determining effectiveness of means in sustainability transitions

Marit Schouten and Karen Maas

(4375) Immobilities and climate-induced vulnerabilities in Uttarakhand: A review of community-based climate-adaptive livelihoods in transition Tulika Bourai, Sailaja Nandigama and Anjali Punia

(4471) The WEF Nexus: aligning research with policy towards operationalisation

Garth Malan

(4658) Combining Strategic Niche Management and Business Model Analysis: the case of Small Hydro Power in Indonesia

Jaco Quist, Tofan Hakim and Thomas Hoppe

(4826) European cohesion at stake? Energy inequalities and the transition agenda

Antje Sabine Klitkou, Pluciński Przemysław, Mariusz Baranowski and Ilina M. Otto

(4996) Social network analysis for governing a biodiversity transition in the agri-food sector

Pia Mueller, Jasmin Possiel and Johannes Halbe

(5298) Nonhuman animal stakeholders in sustainability transitions: experimenting with interspecies democracy

Anne van Veen

(6010) Keeping up with the decarbonization – A new theoretical framework of incumbent organizations' responses to transition risks Ella Tolonen

(6144) The diffusion of biogas systems as a process of societal embedding – The case of Brazil

Hanna Zanatta

(6220) Global interdependencies within the low-carbon transition: Exacerbating or alleviating the risks from cross-border impacts of climate change?

Fanny Groundstroem

(6668) Overcoming lock-ins by fostering coordinated collective action : The case of the French pesticide reduction policies

Viviane Trèves

(6927) How to Improve Local Climate Strategies? A Comparative Analysis of Climate Neutrality in Cities in Sweden

Selma Mujkic

(6938) Caring for a just future: Multidimensional remediation of postmining landscapes in Lusatia, Germany

Nora Stognief and Josephine Semb

(7719) Putting the participatory process into participatory modelling Nourian Peters

(8158) Understanding CEO lobbying for more ambitious government intervention to accelerate sustainability transitions

Matt Gitsham, Ajit Nayak and Jonathan Gosling

(8408) Strategies for Circular Economy in the Nordics: a comparative analysis

Mari Wardeberg, Henrik Brynthe Lund and Jens Hanson

(8424) Circular Carbon: A mitigation (deterrence) strategy for the chemical industry

Ellen Palm, Joachim Peter Tilsted, Valentin Vogl and Alexandra Nikoleris

(8430) WEF Nexus: Digitalisation of resource flows towards justice, socio-ecological transformation and policy integration

Nontsikelelo Mngqibisa

(8637) Counting is Not Enough: Exploring the Utility of Ethnography in Capturing the Nuances of Sustainable Transitions

Aayushi Malhotra, Sailaja Nandigama and Kumar Sankar Bhattacharya

(9061) Refuse to be mediocre? Exploring leapfrog models in peripheral regions

Shuaijun Xue and Chuankai Yang

(9107) Let's Not Miss the Forest for the Trees! Exploring the Relationship between the Metacrisis and Sustainability Transitions Research

Alexander Herwix

(9146) Vision design and assessment using systems modeling Patricia Schattan, Johannes Halbe, Hannes Wender and Pia Müller

(9241) Analysis of the early stage offshore wind in Brazil through the Technological innovation system framework

Alex Azevedo Dos Santos and Drielli Peyerl

(9264) Bringing light, connectivity and waste to local communities - A study of the post-consumption value chain for off-grid solar devices in Kenya

Christine Majale, Godwin Opinde and Ivan Nygaard

(9506)Net-zero discourses in difficult-to-decarbonize industries. A concept on transnational discourses of net zero transitions in the construction industry

Daniel Feser

(9605) Material leakage in the circular economy: an input-output agent-based model

Karolina Safarzynska

### Parallel session 1 - 10:45 - 12:15

#### Dialogue 1: Just Sustainability Transitions (Polar)

Just sustainability transitions are processes of transformative change that (aim to) contribute to more sustainable societies, while (a) improving the quality of life of current and future generations within ecological boundaries and (b) eliminating injustices that are triggered or exacerbated by unsustainability and its underlying causes. How can we conceptualize justice in the context of sustainability transitions? How can social innovation contribute to just sustainability transitions? What is the role of emotions and mental models in just sustainability transitions? What are the tensions between environmental impacts and social justice issues? In this session, we organize four short pitches followed by two rounds of group discussion around four topics. Below is an overview of the flow of the session.

30 minutes: introduction & 4 short presentations of 5 min each

- "Conceptualising Justice in Sustainability Transitions" by Flor Avelino
- "Social Innovation in Just Sustainability Transitions" by Julia Wittmayer
- "Making sense of Justice in Sustainability Transitions: Understanding mental models and emotions in transitions in the making" by Kristina Bogner/Karlijn van den Broek
- "Creating a Transition Tension Map: visualizing trade-offs between social justice and environmental impacts" by Anna Duden/ Toon Meelen

**Session organizers:** Flor Avelino, Kristina Bogner, Karlijn van den Broek, Anna Duden, Julia Wittmayer, Esther Janssen, Bonno Pel, Tessa de Geus, Toon Meelen

#### Session 10.1: Energy Justice (Polar)

Chair: Jesse Hofman

(571) Power, politics and justice in the reconfiguration of energy infrastructure: A process tracing approach to investigate the Pavagada Solar Park in India

Stuti Haldar, Jesse Hoffman, Ananya Peddibhotla, Mithlesh Verma and Amir Bazaz

(1660) A combined niche transition and energy justice study of biomass gasification in Indonesia

Jamie Wong, Jaco Quist and Abidah Setyowati

(2120) Many worlds of energy inequalities?

Przemyslaw Plucinski, Mariusz Baranowski and Antje Klitkou

(8840) Revealing hidden injustices: filling a gap in empirical studies of energy justice

Sander ten Caat, Nynke van Uffelen and Eefje Cuppen

#### Session 1.1: Visions (Flash)

Chair: Anna Wieczorek

(2779) Pluralistic visions to explore pathways towards convergent development between the Global South and Global North

Johannes Halbe and Carolin Janssen

(3406) Learning about learning how to sustainably improve Dutch neighbourhoods in a just way

Luc van Summeren, Anna Wieczorek and Jasper Van Dijk

(3818) Towards epistemic diversity in sustainability transitions: An exploration of hybrid socio-technical systems

Alejandro Balanzó and Monica Ramos-Mejia

### (5157) Multiple Shocks and Trends in Prospective Transitions: a New Methodology for Enhancing Scenarios

Jack Davies, Philip Johnstone, Wendy Schultz, Karin Geuijen, Laur Kanger and Janset Nil Genç

#### Session 1.2: Speed talks (Neon)

Chair: Neelakshi Joshi

(2614) Fast and just? A perspective on designing poly-temporal strategies for local energy transitions and climate action

Neelakshi Joshi and Gérard Hutter

(2800) Crisis? What Crisis? The concept of polycrisis, its relevance for the transitions community, and suggested research directions Niko Wojtynia

(3671) Ports in transition: multi-sector and translocal transitions of large-scale infrastructures in Norway

Timo Wirth, Lillian Hansen, Susanne Jørgensen and Kristin Ystmark Bjerkan

(3943) (Re)framing of challenges in (urban) transition governance Kateryna Pereverza

(4524) Bringing the circular economy to the water sector? Reflecting over the trade-offs thermal seawater desalination in Almería

Mar Palmeros Parada, Gonzalo Gamboa, Patricia Palenzuela Ardila, Diego Alarcon and Guillermo Zaragoza

### (6971) Framings and blind spots in policy-making for SME decarbonization

Harald Wieser, Karin Bachinger and Jakob Kofler

(8110) How are energy transitions under climate policies different? Systematic comparison in the G7 and EU in 1960-2022 with climate target requirements in the electricity sector

Masahiro Suzuki, Jessica Jewell and Aleh Cherp

#### Session 2.1: Tipping points (Solar)

Chair: Bipashyee Ghosh

(3512) Adding timing to the policy mix: Key indicators for adaptive energy transition policies

Floor Alkemade

(5289) Integrated framework of intervention points and transformative outcomes for steering single- and multi-system transitions  $\frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left( \frac{1$ 

Laur Kanger, Bipashyee Ghosh and Caetano Penna

(5370) Transition Pathways, Tipping Points and Discursive Periods: Framing Energy Transitions in Germany, South Africa, The Netherlands and India

Mark Swilling

(7548) Identifying tipping points leading to Eskom's organizational decline 1983-2022: an application of tipping point theory to the electricity sector regime in South Africa

Erica Johnaon and Mark Swilling

#### Session 2.2: Speed talks (Glow)

Chair: Allan Dahl Andersen

(959) A critical review of the Sociology of expectations

Michael Kriechbaum, Paula Pablos De Sanz and Filip Rozborski

(2834) Multi-system transitions: Conceptual reflections and the netzero energy transition

Jochen Markard, Christian Binz and Bernhard Truffer

(2986) Unravelling the sociotechnical dynamics of technology characteristics: Insights from the development and diffusion of carbon capture technology

Amber Nordholm, Jørgen Finstad and Allan Dahl Andersen

(3948) Why materiality matters in transitions – a case of the digital transformation

#### Amelie Bennich and Mats Engwall

(4528) Multi-systems interactions in digitalisation: a comparative case study of its impact on the water and processing industries

Nikhil John, Amelie Bennich, Joeri Wesseling and Koen Frenken

(6966) Broadening transitions studies: applying the Deep Transitions frameworks to the domain of forced migration

Karin Geuijen and Johan Schot

(7995) Accelerating transitions towards sustainability: a systematic and critical review

Kejia Yang and Allan Dahl Andersen

#### Session 3.1: Transitions in the making (I) (Beam)

Chair: Megan Davies

(2128) Investigating transitions in the making – The challenge of linking empirical observations here and now to long-term and open-ended processes of fundamental societal change.

Katrien Van Poeck and Frederik De Roeck

(2775) Transforming 'systems': Which? Who? Why? How? Where? Critical Systems Methodology in Transitions Research

Bonno Pel and Andy Stirling

(4437) Pathways to just energy transitions in local government in South Africa: Are we talking about it?

Kevin Foster and Megan Davies

(9261) Impact beyond experimenting - Conceptualizing emergent impacts from long-term real-world lab processes

Philip Bernert, Annika Weiser, Teresa Kampfmann and Daniel Lang

#### Session 4.1: Transition initiatives (Fluor)

Chair: Christina Bidmon

(1374) Framing the system: seeking power for a discourse under construction in the transition initiative House of Skills

Elke Antoinet Van der Heijden

(2636) Exploring the potential of transformative spaces in sustainability transitions

Mayte Beekman, Sanne Akerboom, Christina Bidmon and Flor Avelino

(4053) Cooperating Climate Crafts – the role of craft guilds in facilitating the roll-out of heat pumps and rooftop PV in Germany Simon Wehden. Jana Jansen and Felix Creutzia

(9622) Community-supported agriculture as spaces to unlearn capitalism?

Laura van Oers, Giuseppe Feola, Hens Runhaar and Ellen Moors

#### Session 5.1: Destabilization and decline (I) (Osram)

Chair: Leonard Frank

(1993) Transition theories' potential to perpetuate or break with the status quo

Katharina Biely

(3934) Policy for regime destabilisation in CAP Strategic Plans Leonard Frank

(6041) Low-carbon reorientation in a declining industry? A longitudinal analysis of coevolving contexts and company strategies in the UK steel industry (1988-2022)

Julian Gregory and Frank Geels

(8547) Market-shaping in a destabilized regime: Declining supply as a window of opportunity for renewable substitutes?

Thomas Magnusson, Wisdom Kanda, Mikael Ottosson and Sofia Dahlgren

### Session 11.1: Musical transformations (Spark)

Organizers: Josie Chambers, Steve Williams, Joost Vervoort, Dan Lockton, and Noor Noor

Special session

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### Parallel session 2 - 13:15 - 14:45

# Dialogue 2: Enabling just transition? A call for reflexive dialogue on just transition research (Polar)

The notion of a 'just transition' is gaining scholarly and political interest, demonstrating acknowledgement of justice as an intertwined component of sustainability transitions. First introduced by labor unions out of concern for the social impacts of environmental policies in the 1970s, it is now at the center of debate on climate and sustainability policies at various levels. The meaning of just transitions has, consequently, become subject to political contestation. Meanwhile, academic perspectives on justice have proliferated and generated varied understandings of just transition.

To further governance of just transitions, critical and reflexive dialogue on the meaning and conceptualization of just transitions is much needed. This dialogue session creates space for discussing dilemmas faced by just transitions research, promoting learning and reflexivity. The session is structured along short propositions, shared by the session convenors and followed by discussions with participants in smaller groups. The propositions prompt discussion on how we should 1) take into account the current injustices, lived experiences and actionable knowledge in enabling just transitions; 2) develop further the understanding of policy mixes in the governance of just transitions; 3) utilize normative frameworks in the scrutiny of just transitions; 4) give recognition to Global South in the study of tele-coupled transition processes.

This session welcomes researchers across all disciplinary backgrounds and varying levels of prior involvement with just transition research. The goal is to harvest insights that create the basis for a perspective article in EIST, to which session participants are invited to contribute.

**Session organizers:** Minna Kaljonen (Finnish Environment Institute); Aniek Hebinck, Anneli Janssen, Neha Mungekar (Dutch Research Institute for Transitions, DRIFT), Teea Kortetmäki (University of Jyväskylä)

#### Session 10.3: Equity (Polar)

Chair: Sreeja Jaiswal

(747) Conceptualizations of justice and equity in energy and mobility transition research: A systematic literature review

Daniel Gusenbauer, Michael Klingler and Jana Plöchl

(2944) Connecting energy poverty and energy justice in sustainability transitions: scoping review with reference to South Africa

Thandeka Tshabalala

(3841) Are energy transitions reproducing inequalities? Power, social stigmas and distributive (in) justice in Mexico

Paola Velasco-Herrejon and Thomas Bauwens

#### Session 1.3: Reflexivity & Transitions (Flash)

Chair: Abe Hendriks

(3193) Subverting the fourth industrial revolution? Analysing social reflexivity in industrious niche spaces for post-automation

Adrian Smith, Mariano Fressoli

(7142) A reflexive compass for navigating complex systems: Expanding methods, practices and worldviews

Haley Fitzpatrick and Tobias Luthe

(7424) Reflexivity and experimentation in transition practice: addressing energy justice in Antwerp

Tessa de Geus, Julia Wittmayer, Flor Avelino and Maria Fraaije

#### Session 1.4: Organizing sustainability transitions (Neon)

Chair: Toon Meelen

(108) Neither Right nor wrong? Collaboration and ethics in research
Julia Wittmayer, Ying Syuan Huang, Evan Boyle, Kristina Bogner, Timo von

Wirth and Katharina Hölscher

(6082) State ownership and sustainability transitions: review and research agenda

Toon Meelen and Jasper Sluijs

(7725) Core Design Principles for Just Sustainability Transitions: A Framework for Organizing Just and Sustainable Collective Action

Alexander Herwix, Kristina Bogner, Michael P. Schlaile, Jonathan Friedrich, Jana Zscheischler and Flor Avelino

(9286) Sustainability transitions to circular cities: between urban vitalism and mechanism

Julia Winslow and Lars Coenen

Session 2.3: Speed and direction (Solar)

Chair: Simona Negro

(5829) Supply/demand energy policy asymmetry in sustainability transitions: a meta-narrative review

Yekatherina Bobrova, Nick Eyre, Tina Fawcett, Colin Nolden and George Papachristos

(6145) The interplay of diversity and directionality in a mission-oriented innovation system: The case of alternative proteins

Brit Bulah, Barbara van Mierlo, Koen Beumer, Alwin Gerritsen, Simona Negro, Marko Hekkert and Laurens Klerkx

(8139) Challenges in accelerating multi-system sustainability transitions: Cross-country comparison of the electrification of transport in Germany and the USA

Karoline Rogge and Nicholas Goedeking

(8398) Governing through Green Deals: Conceptualising the Dynamics of Shifting Responsibilities in Sustainability Transitions

Job Zomerplaag and René Kemp

Session 4.2: Phase out (Glow)

Chair: Zahar Koretsky

(7244) Coping with transition pain: An emotions perspective on phaseouts in sustainability transitions

Kristina Bogner, Barbara Kump, Mayte Beekman and Julia Wittmayer

(1914) From coal dependency to coal phase out in the city of Helsinki Amanda Pasanen and Kaisa Matschoss

(3092) Power dynamics in coal phase-out: a case of Romanian Jiu Valley Zahar Koretsky and Bruno Turnheim

(5163) The role of the private sector in tackling climate change in energy-intensive basic materials sectors

Thea Jung

Session 6.1: Policy mixes (Beam)

Chair: Klaus Kubeczko

(418) Circular Plastics: Analyzing the interdependencies between the EU policy mix and uptake of recycled plastics in the EEE sector David Pfeffer, Denise Reike, Catharina Bening.

(6407) A bibliometric analysis on the governance in policy mixes for the sustainable transition: evidence from a rural area in Southern Italy

Teresa Del Giudice, Gianluca Brunori, Naomi di Santo and Roberta Sisto

(7045) Transformative Readiness of Twin Transitions
Klaus Kubeczko

(7129) Policy Mix for energy sector integration in Germany - Challenges and Strategies

Sarah Olbrich and Dierk Bauknecht

#### Session 8.1: Transitions in the making (II) (Fluor)

Chair: Julia Backhaus

(1370) Social practices in transition: towards a research agenda

Marc Dijk, Julia Backhaus, Tim Schwanen, Frank Boons, Anique Hommels, Toon Meelen, Senja Laakso and Martin Emanuel

(4047) Addressing Complex Problems through Co-Evolving Systems of Actors and Issues: Roles and Practices of Systemic Intermediation in rural Malawi

Maral Mahdad and Domenico Dentoni

(4939) Unraveling 'the making of' transitions: explorations of creative action in collective sustainability initiatives

Frederik De Roeck and Katrien Van Poeck

(8269) Changes of interlocked practices during the COVID-19 pandemic – Insights into transitions in the making from the longitudinal diary study "Logbook of Changes"

Bettina König, Benjamin Nölting and Hannah Wiemers

Session 9.1: Place-making from a transition perspective (Osram)

Chair: Frans Hermans

(1008) Place-making in sustainability transitions: conceptualizing place in regional efforts at fostering fundamental change

Hilde Brouwers, Anne Loeber, Barbara Regeer and Evelien de Hoop

(1933) A transactional approach to place-making in sustainability transitions

Alexander Deveux

(8333) Technical Innovation Systems in Space: A bottom-up perspective of innovation system dynamics

Frans Hermans, David Ayrapetyan and Nicolas Befort

(9844) From Protected Spaces to Hybrid Spaces: Mobilizing A Place-Centered Enabling Approach for Grassroots Innovation Research Huei-Ling Lai

Session 10.2: Reconfiguring energy transitions to achieve justice (Spark)

Organizers: Jesse Hoffman, Maarten Hajer, Iris Mathar, Stuti Haldar, Amir Bazaz, Mithlesh Verma, Ananya Peddibhotla, Bleta Arifi, Philipp Späth, Megan Davies and Mark Swilling

Special session

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### Parallel session 3 - 15:15 - 16:45

### Dialogue 3: Science-Policy debate regional transitions (Polar)

The debate aims to specifically address regional transition challenges, focusing on the Utrecht region. In the debate, the most pressing policy questions will be discussed between experts and scientists. How to combine various innovations on a district scale? May regions offer favorable niche conditions as well as openings of the regime? How to translate local success into global impact?

We will foster a dynamic and diverse exchange of ideas between five policy experts from the district scale to the European scale, including the vice-governor of the province of Utrecht and the alderman of the city of Amersfoort and four scientific experts on the geography of transitions. We strongly encourage active participation from the audience and invite various local and regional stakeholders to join us in this crucial debate.

**Session organizers:** Harm van den Heiligenberg, Stella Gavezou, Toon Meelen and Claudia Stuckrath Alvarado (Utrecht University), supported by the healthy urban living programme of the Province of Utrecht.

**Policy makers:** Mirjam Schmull (program manager Merwedelab), Astrid Janssen (alderman municipality of Amersfoort), Rob van Muilekom (regional minister Province of Utrecht), Robert Dijksterhuis (envoy sustainable building, Ministry of the Interior and Kingdom Relations), and Luis Galiano Bastarrica (coordinator Cohesion for transitions programme, European Commission)

**Policy makers:** Mapula Tshangela, Harald Rohracher, Iris Wanzeböck, and Lars Coenen

#### Session 1.5: Futures and Scenarios (Flash)

Chair: Jeroen Oomen

(1378) Scenario techniques for socio-technical systems as a reflexive practice: A review of recent efforts and a new conceptual framework Jair Campfens, Mert Duygan and Claudia Binder

(2919) Arts for future: the potential of arts-based interventions (ABIs) to contribute to learning and knowledge integration in transdisciplinary workshop settings for sustainable development

Sophia-Marie Horvath and Georg Gratzer

(5652) The role of sound and music in reimagining sustainable futures Stephen Williams, Josephine Chambers and Joost Vervoort

(9692) Future Cities of the Global South: An exploration of sociotechnical and social-ecological imaginaries in African science fiction Merin Raju Jacob

#### Session 1.6: Monitoring and measuring (Neon)

Chair: Eeva-Lotta Apajalahti

(847) Toward measuring sustainability transitions at working life – A novel survey of the wage earner populations' perceptions

Fanni Moilanen, Arho Toikka and Fanni Moilanen

(1043) Making the Implicit Explicit: Towards a Utopic Pedagogical Agenda for Learning in Sustainability Transitions

Koen Wessels, Jesse Hoffman, Kelly Streekstra and Peter Pelzer

(1769) Social Impact of Energy Communities: How to understand and evaluate it?

Eeva-Lotta Apajalahti, Alicja Dakowska and Hanna-Mari Husu and Salvatore Ruggiero,

#### (8989) Reflexive Monitoring in Action of a Healthy Food-Store Intervention: Implementation Barriers for the SUPREME NUDGE Trial

Cédric Middel, Tjerk Jan Schuitmaker-Warnaar, Joreintje Mackenbach and Jacqueline Broerse

#### Session 2.4: Governing Missions (Solar)

Chair: Maral Mahdad

(3493) A survey on how mission-oriented innovation policies matter for innovation activities — The case of the German Energy Research Programme

Carsten Schwäbe, Martina Kovač and Fabio Voss

(4947) The role of transition teams in the formation of mission arenas: A case study

Dieudonnee Cobben, Maral Mahdad, Petra Neessen and Griet Juwet

(6573) A change of direction: Mapping and managing problem-solution constellations in mission-oriented innovation policies

Remi Elzinga, Matthijs Janssen, Simona Negro and Marko Hekkert

(9956) Comparing Mission-Oriented Innovation Systems analyses of sustainable aviation, preventive health, and traffic safety

Joeri Wesselina

#### Session 5.2: Firm reorientation (Glow)

Chair: Kersti Kaltrop

(5991) The changing role of demolishers in the transition to circular construction

Manon Eikelenboom and Alfons Van Marrewijk

(7327) Breaking the ICE? – How demand-pull and technology-push policies for emerging technologies shape firm innovation in incumbent ones

Katharina Gaertner, Hauke Luetkehaus, Joern Hoppmann and Alejandro Nuñez-Jimenez (7726) How do firm internal and external factors combine to contribute to the propensity of energy incumbents to implement radical innovations? Anders Hylmö, Kersti Karltorp and Eugenia Perez Vico

(9250) Leading the way or leading astray? Sustainability reorientation of firms in complex value chains.

Taran Thune and Tuukka Mäkitie

#### Session 6.2: Directionality (Beam)

Chair: Bonno Pel

(274) Industrial Modernity Index: Accounting for directionality

Anna-Kati Pahker

(404) Nurturing niche innovations by agrifood value chains in transitions to agroecology. A comparative analysis of five case studies in France Hadrien Lantremange, Marie-Benoit Magrini, Julien Frayssignes, Laurence Lamothe, Pierre-Eric Lauri, Bénédicte Lebret, Valérie Lullien-Pellerin, Marie-Odile Nozières, Véronique Saint-Gès, Clementina Sebillotte, Marc Tchamitchian, Marie Thiollet-Scholtus and Patrice This

(4674) Making Practical Sense of Directionality: Purposive and Emergent Transition in 'la transition numérique' (Belgium, 2013-2023)

Bonno Pel

(8783) The politics of directionality in transformative innovation policy through the lens of policy process frameworks

Sabine de Graaff, Iris Wanzenböck and Koen Frenken

#### Session 6.3: Futures (Fluor)

Chair: Jonathan Friedrich

(2132) Transformative or incumbent futures? How the future of mobility is imagined in sustainability transitions research

Tom Hawxwell, Abe Hendriks and Philipp Spaeth

(3207) Innovation packages as a method to strengthening cross-disciplinary collaboration towards a materials transition

Mariette McCampbell, Cees Leeuwis, Wouter Post and Harriette Bos

(4418) Planning for the future of sustainable urban mobility: An Anticipatory governance approach

Subina Shrestha and Håvard Haarstad

(7212) Opening up the future: towards a reflexive approach of imagined futures in sustainability transitions

Abe Hendriks and Jonathan Friedrich

Session 7.1: Fragmentation and transboundary transitiosn (Osram)

Chair: Anne Kantel

(2909) Embedding grassroots innovations: a global survey on ecovillages in the Global North and South

Lasse Kos, Rebeca Roysen, Nadine Bruehwiler, Julius Malin, Jens Koehrsen

(4587) How are macroeconomic implications of the energy transition understood in South Africa? A systematic review

Mlondi Ndovela and Mark Swilling

(4707) The green transition in a transboundary conflict setting: towards empirical theory

Itay Fischhendler

(9340) Sustainability transition in fragmented societies

Anne Kantel, Elisabeth Dütschke, Linda Widdel and Iska Brunzema

Session 9.2: Innovation processes (Spark)

Chair: Kateryna Pereverza

(2870) The dynamics of change towards sustainability in developing countries: Evidence from the Waste-to-Energy transition in Ghana

Maria Tomai, Georgios Papachristos and Shyama Ramani

(4017) The evolving roles of actors in experiment formation: Evidence from community waste management in China

Shengnan Wang, Xuemei Bai, Jeroen van der Heijden and Xin Tong

(4828) Hibernation of off-grid solar e-waste in Kenya - An unintended response to an emerging waste issue

Godwin Opinde, Christine Majale and Ivan Nygaard

(8964) Fostering climate transition through innovative urban governance coordination

Kateryna Pereverza, Harald Rohracher and Olga Kordas

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### Parallel session 4 - 17:00 - 18:00

#### Session 9.3: Speed talks (Polar)

Chair: Katharina Schiller

(2802) Just social sustainability transitions in housing: towards an analytical framework

Darinka Czischke

(3550) Conceptualizing learning between regions and between transitions in the transition-development nexus

Johannes Suitner and Camilla Chlebna

(4356) Towards an integrated theory of individuals' transformative capacities in enacting social innovations: A conceptual framework and empirical evidence

Katharina Schiller and Tanja Kaufmann

(8491) Transforming regions – Tracing the "social" in regional sociotechnical regime changes in the energy sector

Wolfgang Haider

(5112) Sustainable transition research and legal analysis – exploring the extended producer responsibility on packaging in Denmark and Sweden Åsa Romson. Teis Hansen and Stine Hach Juul Madsen

#### Session 1.7: Speed talks (Flash)

Chair: Yuliya Voytenko Palgan

(2084) Spare or Transform – Towards a comprehensive account of diverse transition approaches.

Thomas M.M. Guibentif

(2231) Reflexive modernization: eco-shaming practices as reflexive governance?

Kimberley Vandenhole

### (3920) Institutionalisation pathways of the sharing economy in five global cities

Oksana Mont, Yuliya Voytenko Palgan and Lea Fünfschilling

(8938) Disclosing Each Other Through Reflexive Gaming Laura Brings

### (9110) Sustainability transition by SMEs in a volatile emerging economy: A qualitative exploration

Faisal Shahzad and Arslan Ahmad

#### Session 2.5: Speed talks (Neon)

Chair: Verena Radinger-Peer

### (1071) What is new in designing for transitions – Transition co-design dynamics in high level policy processes

Satu Lähteenoja, Tatu Marttila, İdil Gaziulusoy and Sampsa Hyysalo

### (4488) 'Shared understanding' to kick-off local climate action — a conceptual framework

Verena Radinger-Peer, Sebastian Seebauer, Katharina Gugerell and Magdalena Wachter

### (7122) Organizational materialities as barriers to partnerships for sustainability

Jesper L. Jyderup

### Session 4.3: Speed talks (Solar)

Chair: Anneli Janssen

(3176) Unlocking food-system lock-ins through reinforcing small wins: a case study of a regional transformation towards circular agriculture

Jelle Silvius, Jeroen Candel, Evelien de Olde and Katrien Termeer

(4085) Comparing governance capacities of repair in secondary cities of India – Bhuj and Bhopal

Neha Mungekar and Annelli Janssen

(5757) Systemic barriers in the transition towards circularity in the infrastructure sector

Sanne Bours, Vivian Tunn, Iris Wanzenböck and Marko Hekkert

(6847) Addressing the challenges of system building: an overview of strategies to deal with new lock-in and path dependencies in the transition process

Caterina Pacini, Dierk Bauknecht and Sarah Olbrich

Session 5.3: Niches and social innovation (Glow)

Chair: Cyriac George

(6722) Comparing niche responses to a landscape shock: the case of car sharing in Oslo

Cyriac George and Jørgen Aarhaug

(8628) Implementation of the Systemic Innovation Readiness Level (SIRL) tool, a pro-active and action-oriented approach that can stimulate more systemic solutions

Isabeau Coopmans, Lisa Van den Bossche and Fleur Marchand

(9764) Measuring progress, development and scalability in social innovation; the case of energy communities in Europe

Thomas Hoppe, Michiel Fremouw, Nthabi Mohlakoana and Anatol Itten

### Session 6.4: Speed talks (Beam)

Chair: Laurence Geri

(238) Does Democratic Backsliding Threaten the Sustainability Transition?

Laurance Geri

(7452) Just Transitions and Emancipatory Violence Jack Davies

(9581) The withering away of sustainable innovations as a discontinuation object

Peter Stegmaier

(9947) Reflecting on Colonial Assumptions in Just Transitions Research and Practice

Lauren Peng

### Session 8.2: Roles and habits (Fluor)

Chair: Ingrid Mignon

(2859) Reuse and recycling of building materials: A social innovation's contribution to a circular built environment

Katharina Bullinger

(4184) Old Habits Die Hard? Maintaining sufficiency practices three years after Living Lab participation.

Veronique Vasseur, Sara Fehres, Florian Goldschmeding and Julia Backhaus

(6683) Similarities and differences between public and private intermediaries supporting the adoption of solar photovoltaics in Sweden Lisa Winberg and Ingrid Mignon

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### Session 8.3: Speed talks (Osram)

Chair: Lia Patricio

(1869) Conceptualising Living Labs in Sustainable Transitions Research: a review through multiple perspectives

Anton Sentic and Fiona Zimmermann

(4950) Breaking free from the old and building up the new: A routines perspective on innovative practices in making the transition towards sustainable redevelopment of urban areas

Edith van Ewijk, Kees Stam and Paul Chan

(7541) Engaging Citizens in Sustainable Energy Transitions - A Design Science Research approach

Manuel Aires de Matos, Lia Patricio and Jorge Grenha Teixeira

(7567) Boundary Spanners of Citizen Engagement in Energy Transition Bianca Bănică, Lia Patrício and Vera Miguéis

### Session 9.4: Transnational geographies (Spark)

Chair: Adrian Ely

(192) Global Agency in Multi-Scalar Sustainability Transitions
Djamila Lesch, Johan Miörner and Christian Binz

(3616) Navigating the selection environment: Exploring the resurgence of battery-swapping trajectories in China

Qi Song, Adrian Ely and Karoline S. Rogge

(4265) Evaluating transformative innovation policies in a multi-level governance world: Is the right level of government doing the right tasks? Mary Tziva and Harm Rienks

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### Parallel session 5 - 9:00 - 10:30

### Dialogue 4: Combining Reflexivity and Action – Lessons from Transformative Research and Practice (Polar)

The conference theme underlines the increasing complexity of steering transitions given current environmental and social-economic crises. On the one hand, the accelerating sequence of societal crises leads to pressure on decision-makers in politics and business to put out fires through short-term solutions. This "reactive mode" of decision-making often relies on familiar but unsustainable routines, assumptions and solutions. On the other hand, sustainability-oriented actors from practice and academia increasingly see opportunities to transform society towards a more sustainable state. Sustainable innovations that grow within niche settings become more and more visible to a broader public and often encounter resistance from incumbent actors. With regard to transformative research, the very way in which we learn about and produce knowledge on transitions might also unintentionally reproduce old thinking and decision-making patterns.

This Dialogue Session brings together perspectives from transformative research, anthropology of science and landscape restoration practice to reflect on the aforementioned challenges. The session is structured by two guiding questions: (1) How can sustainability practitioners and researchers foster reflexivity and constructively deal with criticism and adversity? (2) What can a more pro-active mode of decision-making in crisis situations look like, and how can we implement it? The session starts with three speed talks before an open fishbowl format allows for dynamic discussions between the audience and panel members. A graphic recorder will visualize the main strands and elements of the discussion. At the end, some time will be devoted to discussing potential follow-up activities with all participants of the session.

**Session organizers:** Johannes Halbe is an interim professor of transition research at the Institute of Environmental Systems Research, University of Osnabrück, Germany. In his research, Johannes combines participatory systems modeling to assess future visions as well as transition governance concepts to design transformative processes.

Raissa Ulbrich has a background in environmental and resource management and currently works as a research associate at the Institute of Environmental Systems Research, University of Osnabrück, Germany. In her research, Raissa is particularly interested in food system transitions and the active facilitation of multi-stakeholder innovation processes.

Krystin Unverzagt is a doctoral researcher at the Institute on Transformations of Human-Environment Systems (IRI THESys) at Humboldt-Universität zu Berlin. In her ethnographic study of participatory modelling, she looks at knowledge production as a social process.

Ludwig Stegink-Hindriks is head of the innovation department of the State Forestry of Lower Saxony. He is currently developing new forestry business models from a landscape perspective taking into account various ecosystem services. This also involves the organization of social and experiential learning spaces that bring together various land users.

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## Dialogue 5: Discussing the diversity of Qualitative Research Designs in Transition Research (Polar)

Methodological diversity is crucial to examine the expanding and increasingly complex field of transition studies. While this diversity has increased during recent years, there are still some designs dominating the field and others are repeatedly suggested but neglected in published research. This dialogue session aims to take stock of qualitative methodologies and discuss ways to increase their diversity. To prepare for the session, the chairs will conduct an inventory analysis of the qualitative research designs in Environmental Innovation and Societal Transitions (EIST) journal for the past three years, Academy of Management Journal, Research Policy Business and Society for the year 2022.

The first part of the session consists of presentations to stimulate discussion. The presentations include the findings of the inventory analysis mentioned above, a presentation discussing challenges of publishing work using unusual methodology, and a perspective of how methodological diversity has developed in transition community over the years. In the second part of the session, the participants are divided into small groups to discuss the structural factors guiding the choice of methodological research design in transition studies, new qualitative research designs that session participants have utilized or considered utilizing, and challenges related to these designs. In the third part of the session, the ideas from the tables are discussed with the whole group.

The session chairs plan to document the findings of the session and inventory analysis and disseminate them beyond the conference (e.g., write a perspective paper). Particularly enthusiastic and idea-rich session participants might be invited to engage in this effort.

**Session organizers:** Taneli Vaskelainen, Christina Bidmon, Matthijs Punt, Raphaël Belmin, and Bernhard Truffer

## Session 1.8: Understanding security and geopolitics in the context of sustainability transitions (Flash)

Organizers: Paula Kivimaa, Marie Claire Brisbois, Johan Schot, Phil Johnstone, Itay Fischhendler, Inese Zepa and Duncan Depledge

Special session

### Session 2.6: Speed talks (Neon)

Chair: Gül Özerol

## (876) Use of Relational Values in sustainable transformations of rural areas: opportunities or fairy tale?

Sarka Hajtmarova and Mireia Pecurul Botines

(2556) Capturing sustainability pluralities: Towards a diversity-reflexive methodology for food system transitions research

Pernille Nielsen and Simon Bolwig

## (3779) Decolonizing sustainability transitions: Learning from Latin American agri-food movements

Katharina Schiller and Wendy Godek

(5113) What is a sustainable and equitable water governance regime? Testing a framework for transitions in the European water governance Jani Lukkarinen, Gül Özerol, Cesar Casiano Flores, Suvi Sojamo, Joanne Vinke de Kruijf, Ann-Katrin Ellermann, Ulf Stein and Antti Belinskij

(5541) People and agri-food transitions: Adopting an integrated approach to unlock insights into a grassroots innovation in the agri-food sector Marlene Boivin, Stefan Kaufman and Darren Sharp

### (7629) Drivers of change in a mission-oriented agricultural innovation system: Cattle husbandry and beef/dairy supply in Austria

Alexandra Frangenheim, Marie Louise Schneider, Cornelia Fischer, Verena Radinger-Peer, Susanne Waiblinger, Stefan Hörtenhuber, Regina Binder and Marianne Penker

(8828) Temporal conflicts as barriers to transitions in the food system Frank Sejersen

### Session 4.4: Local government (Solar)

Chair: Ksenia Onufrey

(1289) How Do Administrative Sub-Cultures Drive Socio-Ecological Transition? Exploring the Punk Spirit Within Local Governments.

Florian Markscheffel, Marie Graef and Babette Thron

(3995) Waste avoidance behaviour change and the agency of local government

Roelof Vogel and Stefan Kaufman

(8385) Institutional embedding in the making: translating sustainability visions into localized institutional contexts

Ksenia Onufrey, Thomas Magnusson and Viktor Werner

(9996) Local Capacities and Enablers for Transformative Innovation Policy

Julia Winslow and Markus Bugge

### Session 5.4: Agrifood transitions (Glow)

Chair: Jana Zscheischler

(1360) Creating legitimacy for cultured meat in Germany: the role of social cohesion

Dagmara Weckowska, Daniel Weiss, Valentin Fiala, Fabian Nemeczek, Carsten Dreher and Fabio Voss

(2608) Incumbents' in/ability to drive endogenous sustainability transitions in livestock farming: Lessons from Rotenburg (Germany) Jonathan Friedrich and Jana Zscheischler

(4569) An alternative protein transition? Four niche innovations and food industry reorientation

John Andrews, Josephine Mylan and Damian Maye

(8291) Regulating for just transitions: the mixed experience with regulating equitable access to plant genetic resources

Koen Beumer and Anniek Roskam

#### Session 5.5: Circular transitions (Beam)

Chair: Denise Reike

(2886) Transition to a circular economy in construction: Disappearance and re-emergence of circular strategies

Sophie Führer and Christof Knoeri

(3333) Co-creating Inclusive Circular Futures; perspectives for policy & businesses recommendations

Lis Suarez-Visbal, Jesus Rosales Carreon, Blanca Corona and Ernst Worrell

(5124) Transition pathways towards circular use of plastics: the case of aquaculture plastics in Norway

Markus Steen, Teis Hansen, Henrik Brynthe Lund and Sigrid Damman

(6192) How do lock-ins constrain alternative solutions for a Circular Economy? The case of recycling and the transition to a circular plastic packaging sector in the Netherlands

Sanne Bours, Iris Wanzenböck, Vivian Tunn and Marko Hekkert

### Session 6.5: Governments (Fluor)

Chair: Christian Matti

(662) Towards New Perspectives of Multi-Actor Engagement in Sustainable Transitions: Bringing the Supranational Level into View Luka Gudek, Kristiaan P.W. Kok and Jacqueline E.W. Broerse

(3328) The European Framework Programme for Research and Innovation: how transformative is it? Analysis of its evolution over 2002-2023

Bianca Cavicchi, Oceane Peiffer-Smadja and Julien Ravet

(5392) Science-policy-practice interface: A reflexive critical realist autoethnography method for advancing sustainability transitions research in South Africa

Mapula Tshangela and Mark Swilling

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(8902) Using foresight to develop new actionable knowledge for policymaking on sustainability transitions: operationalising concepts and methods for innovation in policymaking

Cristian Matti, Laurent Bontoux and Katherine Jensen

#### Session 7.2: Social movements (Osram)

Chair: Almut Mohr

(684) How do religious organisations engage in sustainability transitions and what are the perceived barriers to this?

Adam Xavier Hearn, Ann-Lea Buzzi and Jens Koehrsen

(1916) Social movements in South Africa's low-carbon transition *Almut Mohr* 

(4247) Sustainability, institutional entrepreneurs and epistemic diversity at crossroads: An analysis of Inclusive Innovation Initiatives with transformative potential in the Global South

Mario A. Pinzón-Camargo, Alejandro Balanzó and Monica Ramos-Mejia

(4940) Sustained coexistence between niches and regimes for commonsbased innovation

Liza Wood

### Session 10.4: Speed talks (Spark)

Chair: Michael P Schlaile

(1628) When bits enter just energy transitions: tensions and synergies in data justice and energy justice

Shah Rukh Shakeel, Jouni K. Juntunen, Max Lacey-Barnacle and Adrian Smith

(3799) Vulnerability in Transition - different conceptualisations, (un) intended consequences and implications for justice.

Seona Candy, Johannes Klein and Kaisa Schmidt-Thome

(6433) Visions for just transition in the food system

Annika Lonkila and Suvi Huttunen

(7750) Who defines what is 'just'? Towards a pluralistic perspective on normativity in transformative research

Michael P. Schlaile, Veronica Hector, Barbara Kump, Kristina Bogner and Jana Zscheischler

(8132) How social is the welfare state - energy poverty in German politics Iska Brunzema

(9821) Banning the use of fossil fuel boilers and private cars in Switzerland: mitigation potential, fairness, and the social structure of the vulnerable

Alexandre Torné and Evelina Trutnevyte

### Parallel session 6 - 11:00 - 12:30

## Dialogue 6: Critical reflections on innovations in transitions studies (Polar)

This dialog session opens a critical discussion on the notion of innovation in transitions. It calls for reflexivity regarding the role of innovation, as well as regarding the normative assumptions underlying the types of innovations needed for transitions studied in, and supported through, transitions research.

Innovation plays a key role in transitions. Dominant theoretical approaches such as the MLP, TIS and SNM put (predominantly technological) innovations center stage and ask what it takes for more sustainable technologies to become embedded within societal systems.

"Science, technology and innovation policies are based on the assumption that innovation is a force for creating a better world" (Schot and Steinmüller, 2018, p. 1561). The framing of innovation policy thereby has shifted from focusing predominantly on growth, over national innovation systems, to a focus on transformative change. Whereas the Schumpeterian techno-economic understanding of innovations as source of growth remains dominant, alternative models have emerged.

Innovation is not neutral. 'Creative destruction' implies winners and losers. This 'competition' calls for a reflexive approach, asking what kind of innovations are desirable, and from whose perspective. This introduces notions of responsible innovation and directionality in innovation (policy). It also implies power struggles, entered into transitions debates as just transitions.

In this dialog session we open the discussion on the role of innovation in transitions. Should transition research pay more attention to alternative types of innovation? And should it critically engage in debates on sufficiency, exnovation and de-growth? What lessons can be learned by incorporating alternative models of innovation?

**Session organizers:** Rick Hölsgens (TU Dortmund University), Bonno Pel (Université Libre de Bruxelles), Kristina Bogner (Utrecht University), Annemiek Temming (Social Impact Factory), Jürgen Howaldt (TU Dortmund University), and Flor Avelino (Utrecht University)

# Dialogue 7: Dramaturgies of Change: the conference installations and the theory of change they represent

Sustainability transitions rely and hinge on shifting social practices and material flows, as well as changes in the ideological commitments of people, communities, and society. Currently, the transitions literature lacks a convincing explanation of how people change their perspectives on how the world is, should, and could be and, with this, how social practice shifts. In this session, we use the notion of dramaturgies of change to explore how social change occurs. We contend that social life, as well as its institutions and regularities, relies on ritualized performances of norms, values, and priorities.

We aim to trigger reflections on performances and practices, as well as implicit theories of social change, in the field of sustainability transitions. We do so by reflecting on the creative installations commissioned by the Urban Futures Studio, that are available for participants to interact with throughout the conference.

Session organizers: Timothy Stacey, Jeroen Oomen and Koen Wessels

### Session 1.9: Impact (Flash)

Chair: Sophie-Marie Ertelt

(299) What is the potential transformative capacity of co-creation processes in open innovation?

Renée van Dis, Evelyne Lhoste, Allison Loconto, Mireille Matt, Lasse Bundgaard, Douglas Robinson and Raphael Stephens

(1060) Sustainability transitions and emerging social issues in scientific publications funded with public resources in Brazil

Maria Lúcia Neves, Gertrudes Aparecida Dandolini and João Artur Souza, Vinicius Ramos and Heitor Souza

(2610) Looking for impact: a review of the societal impact of sustainability transition research over the last two decades

Sophie-Marie Ertelt, Daniel Alejandro de Los Rios Pérez and Natalia Lyly

(9310) Advancing responsible innovation and transformation by cocreating change in research performing organizations

Petra Wagner and Caroline Lackinger

### Session 2.7: Digitalisation (Neon)

Chair: Laura Piscicelli

(3231) Multi-sectoral transformation through structural overlap: analysing the digital platformisation of Chinese society (1994-2021) from an overlapping field perspective

Mingwei Zhang

(5920) Exploring the transformative promise of mission-oriented innovations: Lessons from the development of a European digital twin of the ocean

Matthijs Mouthaan, Koen Frenken, Laura Piscicelli and Taneli Vaskelainen

(8629) Digitalisation as the mass optimisation of industrial modernity? Exploring sustainable digital directionalities for a second deep transition Phil Johnstone and Johan Schot

## (9777) Exploring the role of data policy mixes in the UK's smart and flexible electric-mobility transition

Asli Ates, Karoline Rogge and Katherine Lovell

### Session 3.2: Speed talks (Solar)

Chair: Machteld Simoens

(1121) Complementing action research with artistic and creative methods in multi-stakeholder collaborative urban development projects for reflexive learning

Selina Abraham

(4243) Tracing platforms through apps: a methodological approach for digital platforms in transitions research

Darcy Parks

Machteld Simoens

(6482) A decade of Living Labs for sustainability transitions in European rural areas: Researchers' reflections on the Living Lab approach

Marina Knickel. Sabrina Arcuri and Gianluca Brunori

(8555) An integrated framework for understanding bioeconomy transitions in developing countries

Simon Bolwig, Bockline Bebe and Catherine Kilelu

(9514) A mixed methods approach to anticipate the risk of niche disintegration during the mainstreaming of e-groceries in Canada

Geisha Sanchez, Sarah Burch, John McLevey and Bipashyee Ghosh

### Session 4.5: Speed talks (Glow)

Chair: Els Beukers

### (1388) Can citizen juries provide a means to enable just transition governance?

Suvi Huttunen, Katariina Kulha, Simo Kyllönen, Heli Saarikoski, Jaana Sorvali and Ninni Suni

## (1510) Exploring the potential of public-common partnerships for a transition to mobility commons

Emil Beemer, Gijs Diercks and Derk Loorbach

## (3780) Exploring tensions between adaptation and transformation *Alicia Harley*

#### (4193) Governing leapfrogging?

Cesar Casiano Flores

## (8037) Civic experiments for a "reflexification" of governance - The case of Baden-Württemberg

Julian Bansen, Sophie Urmetzer, Claus Seibt and Sven Kesselring

### (9759) Integrating Intersectionality into the Governance of Just Transitions

Gül Ozerol

## (9899) Regime-level learning in long-term learning communities to support sustainability transitions: an educational approach

Els Beukers and Ferry Boschman

### Session 5.6: Speed talks (Beam)

Chair: Marie Claire Brisbois

## (2299) Just transition in developing countries. The rise, or not, of electric mobility and offshore wind in Vietnam

Daniel del Barrio Alvarez and Akiko Sasakawa

## (2810) Competences for a sustainability transition: A conceptual and empirical investigation

Håkon Endresen Normann, Markus Steen, Tuukka Mäkitie, Henrik Brynthe Lund, Mari Wardeberg, Pål Børing and Antje Klitkou

## (4360) Decarbonizing maritime shipping and aviation: Breaking through carbon lock-in and path dependency in hard-to-abate transport sectors Frauke Urban, Anissa Nurdiawati, Fumi Harahap and Kateryna Morozovska

## (4531) Destabilization and industry's responses in the dairy sector, evidence from Northern Netherlands

Junyu Zhang, Liesbeth Dries and Caspar Van den Berg

(6262) Transition finance: A conceptual analysis and case study of its role in Eskom's Just Energy Transition Process (Komati Project Pilot)

Priscilla Jezi

## (9521) Beyond resistance? Exploring dynamics of incumbency in South Africa's power sector reform

Nichola Richards and Megan Davies

### Session 8.4: Technologies and Society (Fluor)

Chair: Julia Wittmayer

### (843) Pathways of phase-out - diversifying patterns and governance approaches

Annelli Janssen, Aniek Hebinck, Neha Mungekar, Tessa de Geus, Gijs Diercks and Julia Wittmayer

## (5508) Competing terms for complementary concepts? A systematic literature review on social acceptance and legitimacy of low-carbon technologies

Sven Alsheimer, Tamara Schnell, Sebastian Rohe and Camilla Chlebna

### (7320) Roles of citizens in sustainability transitions: The example of the Darmstadt Citizen Panel

Helena Müller and Daniel Hanss

#### (8935) Regime Orchestration of Consumers: An Analysis of Business Planning Practices in the British Electricity Networks Sector

Ronan Bolton and Helen Poulter

### Session 10.5: Narratives (Osram)

Chair: Kimberley Vandenhole

(1634) Narratives in South Africa's just energy transition process Almut Mohr

(1819) Venturing through the window of opportunity or sitting on its sill? Exploring the implications of narrative archetypes during the COVID-19 crisis for sustainability transitions

Veronica Hector, Michael Schlaile, Lukas Bäuerle, Luis Peters, Annette Hilt and Silja Graupe

(8486) Improving Discourse Network Analysis methods to identify critical and disruptive moments in sustainability transitions

Kimberley Vandenhole, Kristjian Garic and Philip Leifeld

(8751) Using narratives to map the 'wickedness' of problems and solutions in sustainability transitions – the case of agri-food in Norway Benjamin Smith

## Session 11.2: Behaviour in transitions: From perception to action (Spark)

Organizers: Karlijn van den Broek, Stefan Kaufman, Paula Bögel, Tina Venema and Rob Raven

Special session

### Parallel session 7 - 15:15 - 16:45

## Dialogue 8: Integrated problem solving in transdisciplinary transition research (Polar)

The session will discuss experiences with integrated thinking and the possibilities for, and limits to, integrated problem solving, as evidenced in transdisciplinary transition research. In integrated problem-solving, negative effects on nature and society are reduced thanks to a collective action frame, design thinking and the alignment of different institutional logics. We invite scholars whose research involves or relates to changing practices and (social) learning in sustainability transitions to share and discuss their insights. By sharing experiences from prior research, discussing strategies and methodology, as well as conceptual frameworks we aim to consolidate the existing understanding of the role of practices in sustainability transitions, and bridge the dispersed literature on integrated problem-solving and social learning (van Mierlo & Beers, 2020). Giving attention to incumbent practices and how they change allows researchers to engage with and challenge actors' assumptions and sectoral rules to open the space for innovation. The dialogue will address the following main questions: Are the creation of a collective action frame, social learning, design thinking and intermediation critical conditions for integrated thinking and problem solving? To what degree does integrated problem solving depend on pluralism, reflexivity, and interactive decisionmaking?

The session will bring together insights on social learning, institutional logics and integration theory. Thus far, the process by which actors adapt or reject incumbent practices and organizational logics has not been a major focus of transitions literature (Upham et al., 2020), despite the crucial role of social learning in achieving systems change (Costa et al., 2022). Integration theory and practice is a new field of scholarship engaged with issues of integration, including the barriers to it (Hoffmann et al. 2022; Bammer et al. 2020). We also hope to learn about the role of collective action frames and the process through which they get

established, and how partnerships and collective actions are contingent on the congruence of institutional logics and frames of action (Vogel et al., 2020).

**Session organizers:** René Kemp, Véronique Vasseur and Florian Goldschmeding

## Dialogue 9: Varieties of economies in cities: moving beyond growth-oriented economic paradigms (Polar)

As the contradictions of growth-oriented economic paradigms and related notions of ecological modernization come to the fore, scholars increasingly criticize the silence of sustainability transitions research on underlying economic paradigms and the deeper reasons for unsustainability (Feola 2019; Feola 2020; Feola et al. 2021; Newell 2020; Pansera and Fressoli 2021; Pansera and Owen 2018; Susur and Karakaya 2021). Arguing that change concerns not only socio-technical but also socio-economic systems, they call for an explicit engagement of sustainability transitions scholars with critical debates on growth-oriented economic paradigms. To open a debate on alternative futures, they propose economic conceptions like de-growth, commoning economies, sharing economies, or the economy for the common good.

Given the pivotal role of cities for sustainability transformations, the question arises about how to envision and shape pathways towards post-growth realities in cities and local communities. As there are multiple interpretations of post-growth cities, the idea of the dialogue session is to localize concrete examples of post-growth initiatives (e.g., sharing models, repair cafés) and elucidate the implications of (abstract) economic conceptions for local structures, cultures and practices.

We want to encourage dialogue on the following questions:

- How to envision, explore and experiment with post-growth initiatives in cities?
- Which conceptual and methodological tools and frameworks can be applied to examine alternative economies in cities?
- How to innovate multi-level and local governance arrangements to foster systemic change towards post-growth realities in cities?

Key findings are drawn together to define avenues for future research and develop a perspective article on the transformation towards post-growth cities.

**Session organizers:** Franziska Ehnert (Leibniz-Institute of Ecological Urban and Regional Development), Karoline Augenstein (Leuphana University Lüneburg), and Neelakshi Joshi (Leibniz-Institute of Ecological Urban and Regional Development)

**Speakers:** Guiseppe Feola (Copernicus Institute of Sustainable Development, Utrecht University), Jennie C. Stephens (School of Public Policy and Urban Affairs, Northeastern University), and Anton Brokow-Loga (Bauhaus University in Weimar)

#### Session 1.10: Environmental Politics (Flash)

Chair: Karla Locher-Krause

(573) The return of nature: Investigating the conceptions of nature in sustainability transitions studies

Vincent Vindevoghel

#### (4884) Lanscape bound transition

Jesper Holm and Thomas Skou Grindsted

(7428) Rainwater harvesting and the water crisis in Mexico City: a palliative niche for a dysfunctional regime

Jorge Adrian Ortiz Moreno

## (9924) Transformative Change through Spatial Policy and Planning Processes to Enhance Biodiversity Value

Margarida Monteiro, Maria Partidário, Karla Locher-Krause, Yuanzao Zhu and Heidi Wittmer

## Session 2.8: Transformative, radical and disruptive innovation (Neon)

Chair: Koen Frenken

(229) Harnessing disruptive innovation for sustainability transitions: An integrated framework of technology supply and market demand analysis Jeng-Shian Wang, Mu-Yen Hsu and Yu-Chia Ko

(5584) Financial Innovation for Sustainability Transformation, Climate Justice, and Fossil Fuel Phaseout: A Critical Role for Monetary Policy and Central Banks

Jennie C Stephens and Martin Sokol

(6684) The Relationship between Standardization and Transformative Innovation

Knut Blind

**(6776)** A new view on radical innovation and its use in transition studies Koen Frenken, Matthijs Punt

Session 2.9: Incumbents (Solar)

Chair: **Brit Bulah** 

(1444) Perpetuating socio-technical regimes: The role of consultants Shanyun Sam Lu and Lea Fünfschilling

(5609) Incumbents in transitions: towards more diverse understandings Kasper Ampe

(5635) Cohort agency in energy transitions: merging cohort theory and MLP to conceptualise oil actors in nuclear and solar energy

Jelena Stankovic and Michiel Bron

## (7521) All following the same path? Comparing regime-incumbent firms' activities in the alternative protein transition

Julia Kühl and Bernd Ebersberger

### Session 3.3: Energy scenarios (Glow)

Chair: Alejandro Nuñez-Jimenez

(951) An Indicator System for Responsible Research and Innovation

Tobias Buchmann, Matthias Mueller, Patrick Wolf, Marion Dreyer and Frank Dratsdrummer

(3226) A compass in a storm: How energy modelling helps govern the energy transition during crises

Alejandro Nuñez-Jimenez and Siobhan Powell

(8900) Performing Energy Justice Futures: How energy imaginaries shape energy justice practices in the UK's Community Energy sector Nayim Patel

(9560) Dilemmas in the design of future hydrogen regional energy network: A Case Study in Southern Netherlands

Mahshid Hasankhani

Session 6.6: Policy mixes (II) (Beam)

Chair: Xu Liu

(1538) Improving Multi-level Policy Mixes for Sustainable Urban Mobility Transition

Xu Liu, Marc Dijk and Carlo Colombo

(4988) Policy mixes for just transition: towards integrative framework Minna Kaljonen, Ari Paloviita, Suvi Huttunen and Teea Kortetmäki

(8788) Policy mixes, policy success, and policy entrepreneurship: A comparative study of cycling policy in the Netherlands

Pavan Narayana Reddy, Nihit Goyal and Wijnand Veeneman

(9666) Analysing the creation and contestation of hydrogen pathways in the German energy transition through the interplay of policy mixes and actor strategies

Florian Kern, Frieder Schmelzle, Jens Clausen and Klaus Fichter

Session 7.3: Speed talks (Fluor)

Chair: Wouter Boon

(2246) A fly in the ointment: scarcity and poverty among Dutch Jewry in the 17th-19th centuries

Ronny Reshef

(5085) Shifting the Needle: An Ethnographic Exploration of South African Change Agents' Journey Towards a Sustainable Future

Tasneem Jhetam

(6279) Transforming the border of a city: How institutional mechanisms structure policy conflict

Barbara Koole and Eva Wolf

(6936) Coordinating logics towards a socially just product-service system: the role of civil society intermediation in the 'Papillon' project Jonas Van Gaubergen, Erik Paredis and Thomas Block

(8782) The more the merrier? Attitudes to company co-ownership in Swedish solar communities

Anna Bergek

**(9443) Experiments as a form of social pharmaceutical innovation** *Wouter Boon and Tineke Kleinhout-Vliek* 

Session 9.5: Context and space (Osram)

Chair: Christian Binz

(260) Spatial diffusion and niche shielding dynamics: wind power development in China

Kejia Yang

(848) Spatial dispersion of Energy Communities as socio-technical innovations: An exploratory spatial and socio-economic analysis Maria Luisa Lode, Thomas Bauwens, Luis Ramirez Camargo

(6336) Mapping the spatial variation of path dependencies in global regimes – A novel scheme of analysis and illustration in the water sector Djamila Lesch, Johan Miörner and Christian Binz

(7515) The role of context-specific conditions in decarbonising the cement value chain in India, UK, and Germany
Thea Jung

### Session 10.6: Just transitions (I) (Spark)

Chair: Flor Avelino

(2027) Analyzing and accelerating the transition towards safety testing of chemical substances through new approach methodologies

Marjolein Hoogstraaten, Simona Negro, Ellen Moors, Anne Kienhuis, Victoria de Leeuw, Jelle Vriend and Jarno Hoekman

#### (5785) Toward just transformative innovation policies

Eduardo Muniz Pereira Urias, Kristiaan Kok and Ciska Ulug

(9187) Unpacking the Critical Turn in Sustainability Transitions Research in relation to Climate Justice – a theoretical reflection Esther F. Jansen, Flor Avelino, Giuseppe Feola, and Kristina Bogner

(9613) Operationalizing intersectionality as a tool for critical practice in just transitions: opportunities and challenges

Nickhil Kumar Sharma, Dr. Tom Hargreaves, Dr. Helen Pallett and Prof. Charlie Wilson

### Parallel session 8 - 9:00 - 10:30

Dialogue 10: Transitions of the agro-food system: fostering system innovation and destabilize the existing regime (Polar)

#### 1. Introduction to the session

Background on the "agro-food thematic group" (AFTG) within STRN and introduce general objective of the session.

General objective of the session: Provide input for the research and activities agenda of the AFTG

We will use this input for activities of the AFTG in the coming years.

#### 2. Presentations

Six speakers will each give a 6-7 minute presentation to suggest key themes to foster and/or renew the research agenda related to systemic change and destabilization of the existing agro-food system.

The six speakers are:

- Katharina Schiller (Fraunhofer Institute for Systems and Innovation Research ISI)
- Kristiaan Kok (Athena Institute, VU University Amsterdam)
- Jorieke Potters (Wageningen UR, Wageningen Plant Research)
- Christine Hvitsand (Telemark Research Institute)
- Cees Leeuwis (Wageningen UR, Knowledge, Technology and Innovation group)
- Hadrien Lantremange (INRAE Occitanie-Toulouse, Équipe ODYCEE)

#### 3. Dialogue in four groups

Participants will be divided up into small groups addressing the following themes:

- Experimentation and learning
- Scaling up of niches
- Loosening up the existing system
- Transition policy and transformative governance

**Session organizers:** Boelie Elzen (Wageningen UR, Netherlands) and Marc Barbier (INRAE, France)

# Dialogue 11: Stimulating and institutionalizing reflexivity at the boundaries of change initiative and context (Polar)

Reflexivity, or more precisely the set of methods to enhance reflexive thinking by actors in collaborative settings, is a common approach to support system innovation (practices) in relation to complex (sustainability) problems. A prominent, well-known and widely applied methodology is Reflexive Monitoring in Action (RMA) (Van Mierlo et al., 2010), which supports inclusive learning process. Reflection in an innovation network support the transformation of daily practices and development of new associated rules. The aim of RMA is to enhance the reflexivity of system innovation initiatives, i.e., the ability of groups, teams or networks to interact with and affect the institutional setting in which they operate. Hence, reflexivity is a possible outcome of learning (Beers and Van Mierlo, 2017). Assigned reflexive monitors trigger recurrent collective reflection on the results of actions undertaken in the light of systemic barriers as well as opportunities (Beers et al., 2016). Over the past decade, the methodology has been applied in numerous cases in a diversity of domains, such as sustainable agriculture, health and education. In the Netherlands and abroad, the network of practitioners with valuable experiences is expanding rapidly.

Yet, it remains difficult to meaningfully extend reflexive thinking beyond the intervention itself (Schuitmaker et al., 2021). Institutional actors are either unwilling or actively resist a more reflexive stance, oftentimes because they are constrained by non-reflexive practices and standards themselves. To drive sustainability transitions and support meaningful practices the question is how to make organizations more structurally reflexive.

In this dialog session, we will first talk about what it means for the people "doing" reflexive monitoring to operate at the boundaries of an initiative

for system change and its institutional setting. How do these reflexive monitors navigate high ambitions and resistance to change both in- and externally and how it impacts their own roles and motivation? We aim to compare the experiences of reflexive monitors working from within an organization and others, like researchers, operating at an arms' length of system innovation initiatives or an outsiders position: how do their experiences differ and what are the possibilities and limitations for reflexive monitoring?

Second, we discuss experiences of researchers who are working on building structures in organizations that welcome and support reflexive thinking. These researchers work on institutionalizing reflexivity in, for instance, rigid domains like health care, and try to build 'learning organizations'. Approaches include the development of boundary objects, meaningful organizations and/or meaningful measurements. The question is how to sustainably connect new, reflexive, practices to existing logics and structures.

The format makes use of the fishbowl format. Central to the session are two dialogue rounds about user experiences in the form of a fishbowl conversation. Following a short introduction to RMA and the topic of the conversation, the first round starts with at least four reflexive monitors (inner circle) with different roles and positions having a 15 minute conversation on their experiences with the methodology. The audience (outer circle) will be invited to formulate learning questions for another round of conversation (15 mins) with possibly an extra participant from the audience. We then shift the focus to experiences of researchers about institutionalizing reflexive practices in organizations. The second round follows the same structure (15 minutes conversation, learning questions from the audience, 15 minutes conversation. We close the session with a synthesis of important issues and pending questions.

Session organizers: Barbara van Mierlo and P.J. Beers

### Session 1.11: Speed talks (Flash)

Chair: Megan Davies

(919) Positioning yourself responsibly as an action researcher in sustainability transitions

Barbara Koole and John Grin

(1974) How researchers can empower actors in sustainability transitions – insights from a transition management process towards regional climate neutrality in the Swiss Alps

Felix Poelsma, Susanne Wymann von Dach and Stephanie Moser

(6787) Cultivating reflexivity and response-ability: ambitions for transformative sustainability education in Stellenbosch University's Postgraduate Diploma in Sustainable Development

Megan Davies

(6979) Facilitating reflection and learning for societal transitions: drawing lessons from project-based organizations

Joanne Vinke-de Kruijf and Andreas Hartmann

(8368) Learning History in the 'transition system', A method for capturing and diffusing learning in Urban Transition Management Gabriella Doci, Harald Rohracher and Olga Kordas

(8752) Seizing institutional opportunities in transitions: The case of engaged scholarship at the Erasmus University Rotterdam

Barbara Kump, Kristina Bogner, Julia Wittmayer and Mayte Beekmann

(8938) Disclosing Each Other Through Reflexive Gaming Laura Brings

### Session 1.12: Multi-sector interactions (Neon)

Chair: Paula Kivimaa

(588) Multi-system interactions in hydrogen-based sector coupling projects: System entanglers as key actors

Meike Löhr and Camilla Chlebna

(3611) Finland and Norway in the Arctic: the interrelations between security and the energy zero-carbon energy transition

Marja Helena Sivonen and Paula Kivimaa

(5937) Managing the sectoral spillovers of energy transitions— A justice perspective on multi-sector interactions

Laura Kainiemi, Minttu Laukkanen and Jarkko Levänen

(6891) A socio-technical transition perspective on positive tipping points in climate change mitigation: Analysing co-evolutionary dynamics in offshore wind and electric vehicles acceleration

Frank Geels and Martina Ayoub

Session 4.6: Expectation and governance (Solar)

Chair: Kornelia Konrad

(1325) (Too) high expectations? How do energy community actors' construct their role in energy transitions

Andrea Vogler and Barbara Kump

(7303) From car-oriented to car-reduced neighbourhoods – How do the actors' beliefs shape the transition of planning and realising new residential districts?

Annika Schröder and Thomas Klinger

(7365) Networks of expectations and visions in the governance of hydrogen technologies in Germany – a longitudinal, multi-sectoral, multi-technology, and multi-actor perspective

Filip Rozborski and Kornelia Konrad

(5773) Everyday net zero transitions at precinct scale: complications and possibilities

Darren Sharp, Emma Quilty, Rob Raven, Sarah Pink and Megan Farrelly

Session 4.7: Speed talks (Glow)

Chair: Thomas Magnusson

(1045) A Frame for Studying Transformative Governance in the Context of a Socio-Ecological-Technical System

Henna Sundavist and Maria Åkerman

(1094) Why do intermediaries exist in sustainability transitions? A theory Wisdom Kanda, Olof Hjelm and Thomas Magnusson

(2356) Nuclear energy destabilizations: a comparative study of four long-term trajectories

Lucile Ottolini and Bruno Turnheim

(5479) Network reconfiguration in energy transitions - An analysis of electricity transmission projects in remote regions of Europe

Andreas Lindemann, Ronan Bolton and Mark Winskel

(5594) Exploring policy challenges for multi-system transitions: Insights from electrification in Norway

Hilde Nykamp and Allan Dahl Andersen

(9711) Navigating public values in local energy systems: An insider's perspective on value prioritization and conflicts in the design of new energy systems

Kees van der Wel and Sanne Akerboom

Session 4.8: Speed talks (Beam)

Chair: Mert Duygan

(1022) Institutional, organisational, and technological interdependencies in Smart cities: Towards a conceptual framework of urban (digital) transformation

Jörg Musiolik

(1069) A novel backcasting approach to study the governance of urban energy transitions

Mert Duygan, Jair Campfens and Claudia Binder

(4039) Reflective appraisal of transformative innovation policy: Development of the Sustainability Transition and Innovation Review (STIR) approach and application to Canada

Colleen Kaiser, Michal Miedzinski, Will McDowall and Geoff McCarney

(6770) The spatial and transformative fit of transformative climate governance for water supply in the Cape Town metropolitan region

Katharina Hölscher, Jochen Monstadt and Shaun Smith

## (7033) Enabling Transformative Change: Investigating Capabilities for Sustainability in City Management

Riina Bhatia, Matti Pihlajamaa, Anni Jäntti and Kirsi-Maria Hyytinen

(7794) Transformative portfolio-based approach for mobility transitions: the case of Skellefteå, a quickly growing municipality in the North of Sweden

Kateryna Pereverza and Petter Johansson

### Session 5.7: Destabilisation and decline (II) (Fluor)

Chair: Nuno Bento

(2339) Decarbonizing the Supply Chain: A Analysis of Net Zero Commitments Among Automotive OEMs and Suppliers in Canada David Billedeau and Jeffrey Wilson

(2539) Technology Substitution for System Transformation: Reassessing the role of learning and infrastructure

Nuno Bento

(5969) Understanding local destabilization policies in the mobility sector: A comparison of Amsterdam, London and Munich

Stefan Ćetković, Alina Weiss and Maurits De Lint

(8526) How did the German night train die? Examining the destabilisation and phase-out of an established passenger mobility system

Laura Vani Kesore

### Session 10.7: Just transitions (II) (Osram)

Chair: William Niver

(1160) Climate protection and justice: The case of the Western Macedonia delignification

Dimitris Lagouvardos and Stathis Arapostathis

(1727) Scrutinizing the Justice in Arizona's Proposed Just Transition Package

William Niver

(6694) Just not sustainable: justice principles for the mobility transition Sophie Buchel

(3955) Integrating justice principles into computational models supporting energy transition

Aarthi Sundaram, Yilin Huang, Eefje Cuppen and Igor Nikolic

Session 11.3: Conceptualizing the role of finance for sustainability transitions (Spark)

Organizers: Helen Toxopeus, Pieter Pauw, Florian Egli and Friedemann Polzin

Special session

### Parallel session 9 - 11:00 - 12:30

## Dialogue 12: Power to the People: Navigating Energy Communities' Quest for Justice and Equity (Polar)

This dialogue session discusses energy justice considerations in the context of Energy Communities (ECs), including aspects of procedural, distributive, recognition, cosmopolitan, and restorative justice. Our four speakers have worked either conceptually, or empirically on energy justice and ECs in Europe, and North and South America. We will start the session by discussing current justice conceptualizations in literature based on findings of a systematic literature review of energy and mobility-related transition policies. Then, we discuss how ECs were set up in different case studies. In detail, several examples of ECs in Europe emerging under European policy frameworks, just policy designs for ECs under the lead of First Nations in Canada, and a sandbox experiment located in a residential neighborhood EC in Colombia. In short, we would like to discuss current developments and challenges encountered by ECs to foster just energy transitions. The audience is invited to actively engage and share their experiences in this dialogue session.

Session organizers: Shary Heuninckx (Electromobility research centre at the Vrije Universiteit Brussel), Prof. Dr. Christina Hoicka (Department of Geography and Department of Civil Engineering at the University of Victoria), Dr. Maria Luisa Lode (Department of Business and Technology at the Vrije Universiteit Brussel), Juanita Giraldo Quiroz (Department of Engineering at the EIA University Medellin), Daniel Gusenbauer (Centre for Global Change and Sustainability at the University of Natural Resources and Life Sciences), Prof. Dr. Luis Ramirez Camargo (Copernicus Institute of Sustainable Development at the Utrecht University)

## Dialogue 13: Unsustainabilities: an adjacent research agenda (Polar)

Research on sustainability transitions has successfully focused on changes in socio-technical systems to improve sustainability issues. It has studied the rise of hopeful novelties and reflected on the possibilities to transform current regimes.

In this dialogue session, we will start from another corner, informed by the observation that all attempts to foster sustainable alternatives are subject to countervailing forces, amidst developments pointing in the adverse direction. It is timely for transition studies to broaden the agenda and include research on 'unsustainabilities'.

The session is organized into three parts,  $3 \times 30$  min, focusing on (i) empirical explorations, (ii) conceptual clarifications and (ii) a research agenda, respectively.

In the first part, we will collect and discuss forms of unsustainability that interfere with transitions. Peter Wells (Centre for Automotive Industry Research, Cardiff Business School) has agreed to present a study on the rise of Sports utility vehicles (SUVs) that accompanies the turn to electric cars, and counteracts the beneficial results. In addition, Xiao-Shan Yap (Zürich) will present her findings on the prospects of space tourism, a development that is on the agenda of several commercial companies, which raises serious sustainability concerns. A collective brainstorm will bring other issues and phenomena to the fore.

In the second part, we will try to delineate how research on unsustainability differs from and complements research on sustainable transitions. Here, Jochen Markard (Zürich) will take the lead. He will sketch the general outlooks of sustainability transitions research. Together we will reflect on the various concepts and terms to capture the interest.

In the third part, chaired by Harro van Lente, we will discuss what a research agenda on unsustainability would entail and what it might contribute to the understanding and governance of sustainability transitions.

Session organizers: Harro van Lente

### Session 1.13: Mobility and transport (Flash)

Chair: Amir Mirzadeh Phirouzabadi

(5378) Full speed ahead or a bumpy ride for dynamic charging? The infrastructure politics for charging battery-electric trucks in Europe Aline Scherrer

(5640) Full steam astern - the revival of sail cargo ships? Hanna Bach

(7559) Individual vs. cross-failure policy interventions for sustainable transitions: a system dynamics modelling for low-carbon vehicle mobility systems

Amir Mirzadeh Phirouzabadi

(9453) Explaining sustainability transitions by coupling the multi-level perspective with the multiple streams framework: The Dutch transition to electric vehicles

Rima Arab, Nihit Goyal, Thomas Hoppe and Linda Kamp

### Session 4.9: Urban transitions and policy (Neon)

Chair: Harald Rohracher

(9509) The missing link of infrastructure appropriation: Explaining the limited effectiveness of infrastructure planning for informal settlement upgrading

George Kiambuthi Wainaina and Bernhard Truffer

(4435) Unraveling (de)politicization in urban experiments for sustainability transformations: A case study in Amsterdam

Darren Sierhuis

(7352) Ramifications of a novel policy idea. Comparing transition pathways to urban circular economy in four cities

Erkki-Jussi Nylén, Ari Jokinen and Pekka Jokinen

Session 4.10: Learning (Solar)

Chair: Jaco Quist

(518) Mechanisms for the transition to care for health; reflexive monitoring of Hi!Noord

Tjerk Jan Schuitmaker

(3445) The role of learning in governance capacities development for regional energy transitions: Mobilizing insights from a case study of a Dutch energy region

Jasper van Dijk and Anna Wieczorek

(4210) Tie together to unravel sustainability challenges: Exploring how "to dock" to diffuse learning from innovative "expeditions" to "cruise ships" and collaboratively navigate sustainability transitions.

Clara Saglietti, John Holmberg and Johan Holmén

(8736) Learning in Transition Experiments for Circular Construction: A Typology for Experiment Design and Evaluation

Mart van Uden, Sietse Gronheid, Jaco Quist and Ellen van Bueren

Session 4.11: Unboxing the concept of intermediaries for steering transformative change (Glow)

Organizers: Wisdom Kanda, Ingrid Mignon, Teresa Sánchez-Chaparro, Jaime Moreno-Serna, Kateryna Pereverza and Miguel Soberón

Special session

### Session 5.8: Agrifood transitions (II) (Beam)

Chair: Niko Wojtynia

(2362) Transdisciplinary approaches to the governance of sociotechnical transitions? - Findings from a transdisciplinary process on the digitalisation in agriculture

Jana Zscheischler

(4499) Spheres of transformation: exploring personal, political and practical drivers of farmer agency and behavior change in the Netherlands

Niko Wojtynia, Jerry van Dijk, Marjolein Derks, Peter Groot Koerkamp and Marko Hekkert

(5742) Transition pathways and policies towards a more resilient food system

Irene Kuhmonen, Tuomas Kuhmonen and Atte Penttilä

### Session 5.9: Speed talks (Fluor)

Chair: Jörg Musiolik

(811) Management of End-of-Life Vehicles Plastic Waste in Europe: the role of chemical recycling technologies

Alberto Arca

(1715) Circular economy adoption and sustainability innovation in the mining sector

Konstantin Born

(1764) Understanding digital transition in the water sector – the role of water data space imaginaries in accelerating sustainability water transition pathways

Chiara Farné Fratini and Peter Steen Mikkelsen

(2202) Fitting Business Models in Sociotechnical Transitions: The Marketing of Utility Energy Efficiency Programs in Canada and the US Alex Dandridge

(2563) TIS context dynamics in the second phase of the energy transition: the market formation of collective self-consumption solutions in Switzerland

Jörg Musiolik and Leticia Müller

(3038) Innovation in Canadian Electric Power Utilities: An Examination of Subsidiary Creation as a form of Organizational Ambidexterity

Heidi Crummell

(6739) Scaling up cargo bike sharing organisations: A case study of "Grätzlrad" in Vienna and "LastenVelo e.V." in Freiburg

Kaja Zimmermann and Yuliya Voytenko Palgan

### Session 9.6: Regional contexts (Osram)

Chair: Fergus Haswell

(665) The Where and How of Living Labs: Understanding the Contexts, Settings, and Pathways

Tiril Marie Anthonsen Aamot

(781) The geography of sustainability missions: A cross-country comparison of circular economy policy approaches in the Global North and Global South

Fergus Haswell, Oreane Edelenbosch, Laura Piscicelli and Detlef van Vuuren

(7202) How socio-technical configurations travel: The translation of innovative sanitation solutions between European cities

Johan Miörner, Vasco Schelbert and Christian Binz

(9546) Linking industry dynamics to sustainability outcomes: the role of regional valuation dynamics in transforming Bengaluru's urban water sector

Johan Miörner, Christian Binz, Huiwen Gong

### Session 9.7: Regional context (II) (Spark)

Chair: Jannika Mattes

(4248) Scaling sustainability transitions: The role of stakeholder-based collective agency in social venture regional growth.

Geoffrey Desa, Sandip Basu and Oscar Jerome Stewart

(4426) Regional trajectories of eco-innovation specializations

Hendrik Hansmeier and Sebastian Losacker

(5625) Regional transition fields: How processes of adaptation and delimitation shape regional transitions

Camilla Chlebna and Jannika Mattes

(8147) Changing regional innovation culture for sustainability transitions: the interrelationship between culture, imaginaries and narratives in Baden-Württemberg's mobility transitions

Huiwen Gong and Bernhard Truffer

### Parallel session 10 - 15:15 - 16:15

### Session 1.14: Research organizations (Flash)

Chair: Jonas Torrens

(3309) Introducing TransLab - A method for organizational development of university-driven Innovation Labs towards transformative change.

Tobias Held and Alexandra Hausstein

(4736) Transformative research in a Dutch technical university: seeds and growth directions

Jonas Torrens, Anna Shindler, Anna Wieczorek, Gaston Heimeriks, Oscar Romero Goyeneche and Orlando Martin Vazquez Villegas

(9445) The change agent teaching model: educating entrepreneurial leaders to tackle grand societal challenges

Frank van Rijnsoever, Silas Sitzer and Yvette Baggen

### Session 5.10: Speed talks (Neon)

Chair: Tuukka Mäkitie

(3748) The industrial dynamics of a sustainability transition: assessing the multi-sectoral interactions of electrification in Norwegian coastal shipping

Tuukka Mäkitie, Allan D. Andersen, Markus Steen and Jens Hanson

(4827) Discovering industrial base capabilities for green economy industrialisation in South Africa

Alboricah Rathupetsane

(6514) Can Oil-Producing Gulf Arab States Localise Clean Energy Technological Innovation: an analysis using Innovation System approach Aisha Al-Sarihi (9392) Bridging the strategy-operation gap: Towards a tool for sustainable transformation in cities

Martin Visby Buchard

(9938) Intermediaries in the wood construction innovation system in Norway and Finland

David Lazarevic, Antje Klitkou, Riina Toivanen and Lina Ingeborgrud

### Session 6.7: Speed talks (Solar)

Chair: Edilaine Camillo

(206) The citizen multiple. Investigating the enactment of citizen engagement in the energy transition

Irene Bronsvoort

(639) How public and political discourses accompanied solar PV uptake over five decades in Switzerland

Léon Hirt

(2342) Conceptualizing Transformative Power in Sustainability Transitions: the Case of Energy

Flor Avelino, Marie Claire Brisbois, Tessa de Geus, Sabine Hielscher, Karoline Rogge and Marta Struminska-Kutra

(4496) The effects of the lack of coherence between energy policy and industrial policy on climate policies: an analysis of Brazilian airconditioners' case

Edilaine Camillo, Rodolfo Gomes and Flávia Consoni

(6625) Network public policy dynamics in energy transitions in the Global South

Masiel Melissa Pereira Prado and Cesar Enrirque Ortiz Guerrero

### Session 6.8: Speed talks (Glow)

Chair: Taran Thune

(3017) Tracing an experimental policy process: 'mission-oriented' research and innovation policies for transformative change

Taran Thune, Håkon Endresen Normann, Lisa Scordato and Silje Marie Svartefoss

(4082) Transition policy interventions: a systematic review of what works and why

Mohammadreza Zolfagharian, Rob Raven and Benjamin K. Sovacool

(4501) Quiet capture in noisy politics of plastics

Nur Gizem Yalcin, Erik Paredis and Melanie Jaeger-Erben

(7499) A quantification of geopolitical risks in global hydrogen trade Patricia Wild and Nicole Niesler

(8246) Power in urban logistics: A comparative analysis of networks and policymaking for sustainable urban logistics

Subina Shrestha, Håvard Haarstad and Rafael Rosales

#### Session 7.4: Speed talks (Beam)

Chair: Giuseppe Feola

(281) The role of feminine leadership in (agrifood) sustainability transitions

Frederike Praasterink and Michelle Hahn

(3844) Community-Led Initiatives efforts to (re)direct European Union funding lines

André Girardi

(4729) Sustainability action from the bottom-up: The example of Vorarlberg (Austria)

Marc Gimenez Maranges, Jürgen Breuste and Angela Hof

(5994) Schismogenesis and prefiguration in grassroots innovation movements

Giuseppe Feola

### Session 8.5: Speed talks (Fluor)

Chair: Maral Mahdad

(1855) Navigating Tensions in Business Model Innovation for Sustainability: A design-oriented systematic review

Christopher Jr Galgo, Maral Mahdad and Gohar Isakhanyan

(6645) The role of social norms in actions for preventing food waste Isabeau Coopmans and Fleur Marchand

(6779) How and when do social movements foster policy innovation? The transition to cycling in three European cities

Maria Eleftheria Dimou, Nihit Goyal and Wijnand Veeneman

(7926) Embodying the Wadden: activism, cycling and transforming the human nature dichotomy

Simone van Wieringen

Session 9.8: Speed talks (Osram)

Chair: Tessa Leferink

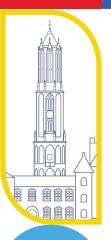
(2454) No car anymore? A study on the role of life events on travel behaviour, using 7 years of panel data

Tessa Leferink, Kees Maat and Floor Alkemade

(3158) Transitions in the mobility sector — Empirical evidence from hydrogen fuel cell, electric, and internal combustion engine vehicles Parsa Asna Ashari, Daniel Weiss and Knut Blind

(6426) Local learning and global-local niche interaction: Deployment of solar photovoltaics in Japan

Yi-chun Chen, Masahiro Sugiyama and Hideaki Shiroyama



## 14<sup>th</sup> IST conference 2023 Responsibility and reflexivity in transitions

Copernicus Institute of Sustainable Development Utrecht, the Netherlands

30<sup>th</sup> August - 1<sup>st</sup> September 2023



Pathways to Sustainability Copernicus Institute of Sustainable Development





