

Report on the Sandpit: Circular and Inclusive Cities, 30th of June 2021, organised by the Working Group Circular and Inclusive Cities

Context

The demand for resources has risen sharply in recent years, whereas the available supply is shrinking. A circular economy does not produce waste and keeps recycling raw materials. This allows us to unburden the environment by reducing demand for virgin resources. Circularity as a leading principle is attractive but yet abstract. How the principle relates to societal practices for citizens and companies is not well understood. The Alliance between Eindhoven University of Technology (TUE), Wageningen University & Research (WUR), Utrecht University (UU) and University Medical Centre Utrecht (UMCU) brings together complementary areas of expertise which together are needed to find safe, responsible ways of enhancing circular economy. Within the Alliance, the Working group Circular Society aims to do groundbreaking research relevant for practical solutions contributing to societal transitions towards circular Societies.

Over 40 researchers and other professionals from the Alliance, along with some guests, participated in an online sandpit session to identify and match promising interdisciplinary research ideas that will shape the conditions to accelerate the transition to circular and inclusive cities.

The central question for the sandpit session was:



Which interdisciplinary research is needed to accelerate the transition to circular and inclusive cities?

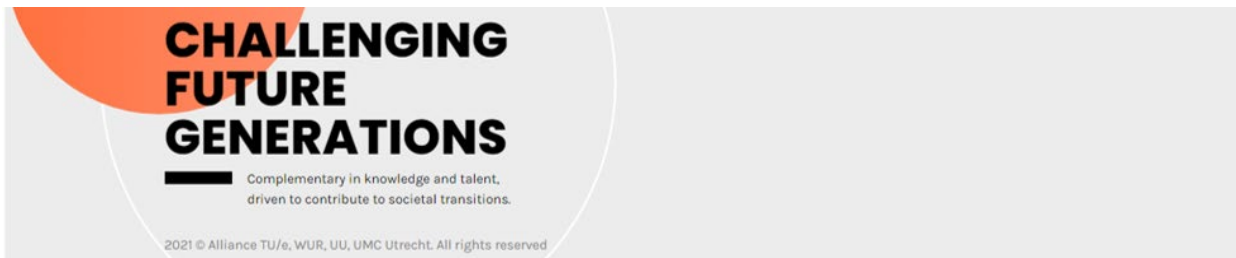
Setup

The session was conducted online and facilitated by Wageningen Dialogue Centre. It was built on the idea to invite researchers from within the Alliance to pitch their research ideas and proposals for collaborative projects. Before the event, the Working group made a selection of the most suitable pitch ideas in response to our call for ideas.

The project ideas were centred around the following themes as described in the [White Paper](#):

1. Organising synergy between technological, societal, and organizational innovation
2. Integration of circular and inclusive initiatives.
3. Investigating how social inequality affects circular and sustainable solutions and develop ways to mitigate undesirable inequality effects.
4. Making space for nature to drive circular, inclusive cities.

Altogether, 11 pitches were presented over two rounds. Each of these rounds was followed by two rounds of feedback using the Ritual Dissent/Assent method. Ritual Dissent/Assent is a workshop method designed to test and enhance proposals, stories, and ideas, by subjecting them to ritualized dissent (challenge) and assent (positives). The pitchers gathered insights from this feedback and then presented improved/adapted project ideas.



Finally, the project ideas were put to poll to gauge the preference of the group.



Plenary interview of Kieran Campbell-Johnston and Denise de Ridder by Chris Backes

In an introductory session, Prof. Chris Backes, Professor of Environmental Law at UU, laid the ground for the goals for the sandpit session. In a short interview with Kieran Campbell-Johnston, a researcher at Copernicus Institute of Utrecht University, the importance of the topic of circular cities was explored. Kieran highlighted the knowledge gaps and paradoxical consumptive behaviour of cities which hinder transition towards circular cities. Similarly, in a short interview with Dr. Denise de Ridder, a Professor of Psychology at Utrecht University, the role of human psychology in creating sustainable and circular cities was explored. Interestingly, Denise noted that most of human behaviour is habitual and not intentional. Therefore, enabling people to make sustainable choices rather than just motivating them should play an important role in circular transitions.

Summary of the pitches and improved ideas based on the Ritual Dissent/Assent feedback rounds

1) Katrin Merfeld: Stakeholder matchmaking - Platform Business Models for urban nature based solutions

(Tenure-track Professor in Market & Business Development at Utrecht University, School of Economics)

Stakeholder Matchmaking - Platform business models for urban nature-based solutions		Pitch 1.1: Katrin Merfeld (UU) I/II Research Theme 4: Making space for nature to drive circular, inclusive cities.
	I'm Katrin, a tenure-tracker at Utrecht University School of Economics , section Marketing & Business Development. I work together with Helen Toxopeus (Round 2, Pitch 5) on Business models for urban nature-based solutions . For this project, we plan to build on my expertise in the platform economy and Helen's expertise and network for urban NBS . We need support to explore platform business models (BMs) for urban nature-based solutions to facilitate their uptake.	 Our goal? Make stakeholder matchmaking for urban NBS as easy as finding your partner on parship.

Katrin highlighted several problems in implementing Urban Nature-based Solutions (NBS)(e.g. green roofs) such as difficulty in finding, connecting and coordinating potential stakeholders. She proposes to use Platform Business Models (PBMs) (similar toAirbnb) to address these problems. The preliminary research question for the proposed project is-

“What are the platform business models facilitating Urban Nature-based Solutions?”

Katrin seeks experts in sustainability, smart cities, governance and others to collaborate on this project.

Based on the feedback received, Katrin aims to take a broader perspective going beyond business models and involving stakeholder benefits and implications. She also intends to explore more options other than digital platforms. She also noted from the feedback that while platforms can promote collaboration and inclusion, stakeholder access and compliance should be ensured.

2) Daisy Yoo: New ways of co-futuring circular & inclusive cities

(Assistant Professor at TUE Industrial design – Transforming practices squad)

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Daisy identified that engaging stakeholders with different backgrounds and conflicting perspectives is often challenging. Moreover, developing future visions for circular cities is even more challenging as the future is elusive. Therefore, Daisy proposes to use design method techniques to create a space for people to openly share fears and hopes for the future and create a shared vision. She also aims to design tangible prototypes of future cities.

The central research question for the proposed project is:

“How can we ensure that the public and stakeholders from across the society are engaged in developing future visions, and the transitions to them, inclusively and ethically?”



dr. Daisy Yoo
d.yoo@tue.nl
dr. Caroline Hummels
c.c.hummels@tue.nl
Transforming Practices Squad
Dept. of Industrial Design, TU/e

Daisy seeks experts in Built Environment (TUE), social sciences, governance, law and policymaking, and geosciences to collaborate on this project.

Based on the feedback received, Daisy aims to further scope the focus of the project regarding what particular issues and stakeholders to consider and the implications thereof. She would also consider the implications of engaging in a speculative designerly approach and ethical considerations of such an approach.

3) Sanne Djojosoeparto: Creating healthy and sustainable food environments for all citizens

(PhD candidate at the Dept. of Human Geography & Spatial Planning at UU, Evaluating government policies influencing food environment)

Government policies regarding food often affect people’s food choices. Fast-food chains being better marketed and offering relatively cheaper food has increased the risks of obesity & other diet related disorders. Sanne noted that the local government of Utrecht has made policies to create environment such that healthy & sustainable food alternatives are the easier choices. However, how much is actually implemented is not well-understood.

Sanne proposes to adapt & implement the ‘Healthy Food Environment Policy Index’ developed by INFORMAS to evaluate these local policies. Emphasis will be on inclusion of vulnerable groups in this study. The expected outcomes are recommendations for local governments and insights into greatest benefits for vulnerable population in Utrecht.

Sanne Djojosoeparto MSc



Dr. Carlijn Kamphuis



Dr. Maartje Poelman

Sanne sees a potential collaboration between UU, WUR, TUE, INFORMAS, CPHR-Deakin University, etc. for this project.

As per the feedback received, Sanne would consider including other cities for a comparative study and the delivery platforms such as UberEats. She would also evaluate the policies for food suppliers.

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4) **Torsten Schroeder: Accelerating circular building transformation**

(Assistant Professor of Sustainability in Architectural design at TUE Dept. of Built Environment)

The Construction sector plays a key role in resource consumption and emissions. Therefore, building practices will have to undergo a radical transformation to achieve circularity. Torsten proposes a project on the lines of two research questions to achieve this-

“How to translate the 10R model into Building design strategies?”

“How can we create alternative urban scenarios, that contribute to bring ‘desirable circular futures’ into the present?”

The expected outcomes of this project will be building guidelines, measurement tools, and a positive vision for circular buildings. This project would need collaborative expertise in policy, procurement processes, production chains, circular business models, biobased materials, LCA, etc.

Based on the feedback received, Torsten would consider not focusing too much on building design strategies, but instead on translation of the concept of circular economy into building design practice. He also sees exciting opportunities to collaborate with some of the other proposed projects on nature-based solutions, sustainable financing, inclusion and participation.



Dr Torsten Schröder
Assistant Professor of
Sustainability in Architectural Design

TU/e Department of the Built Environment

UDI (Urban Development Initiative)
UIC (Urban Innovation Center)
BTIC (Bouw en Techniek
Innovatiecentrum)

Interdisciplinary background:

- Architect (10 years of practice)
- PHD in the LSE Cities Programme
- Full time researcher / teacher (now)

5) **Barnita Bagchi:**

(Associate Professor in Comparative Literature at UU)

6) Trond Selnes: Climate adaptation in urban settings, finance beyond public budgets
(Wageningen Economic Research, Governance with or without governments)

Trond noted that public budget is often not sufficient to trigger big changes in greening the cities. Therefore, with the proposed project he wants to focus on searching for new ways of financing circular economy & climate adaptation.

1: I am Trond Selnes, Wageningen Economic Research, researcher governance with or without government



2: My own focus is on governance: the rules of play on land & sea. In this project we search for new ways of financing circular economy & climate adaptation by a greening of the city.

The main research question for the project is-

“How to scale up and mainstream nature based solutions for climate adaptation with the help of private finance?”

Potential collaboration for this project would involve WUR, UU, Municipalities, insurers, banking sector, etc.

Based on the feedback, Trond would further elaborate the methodology for the project and connect it with the design for circular cities that some of the other projects propose to work on.

7) Els Rose: Citizen discourses in the early middle ages
(Professor of Medieval Studies at UU)

St. Martin, the patron saint of Utrecht and a medieval figure can be a powerful symbol of a pluriform, inclusive city. Based on this, Els proposes a project idea:

“Reinventing traditions around St. Martin, link artistic expressions with social interventions in the city in connection with SDGs.”

Circular Saint



Els Rose
UU, Medieval Studies

How does a medieval symbol (the cult of an urban patron saint) contribute to an inclusive city in the 21st century?

It would be an interdisciplinary project engaging citizens, education and cultural partners. Potential collaboration partners involve social sciences group at WUR and TUE. Els sees a potential to bridge Humanities and social sciences disciplines with this project.

8) Dan Lockton: Co-creating experiences of transition – live in the future now.
(Assistant Professor of Industrial design - Future everyday, transition design group at TUE)

The project proposed by Dan is based on the idea what if people could experience a future version of everyday life. The central research question addressed in the project is:

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“How can we ensure public and stakeholders across the society are engaged in developing future visions and transitions to them, inclusively and ethically?”

Dan proposes to do this through participatory experiential learning, pilot prototypes for people to live in future versions, design and experiments around social practices, energy, work, transport, biodiversity in city, etc.

Potential collaboration partners for this project would be UU Urban Futures Studio, UU Copernicus Institute, UU Centre for Global Challenges, TUE Built Environment/Living cities and WUR Environmental research.



From the feedback received, Dan realized the need to incorporate strategies for an equitable form of participation, so that a wider section of the society is involved in “experiencing the future.” Also, he aims to further clarify the framework of the project in terms of geographies and scales of the futures simulated. He also emphasized that the project will be consider plural futures, and that academicians’ vision of future will not be imposed on the public.

9) Jonas Torrens: Circular cities in the making – Monitoring & learning from rapid urban transformations & massive urban missions

(Postdoc at UU, soon to be Assistant Professor at TUE, expertise in Urban transitions & transformations, policy experimentation, transformative innovation policy)

Jonas noted that the growing ambition and urgency around circular urban transformations and complex processes involving multiple systems/practices, along with novel means of governance call for developing a synergy. Therefore, he proposed a project with the idea of-

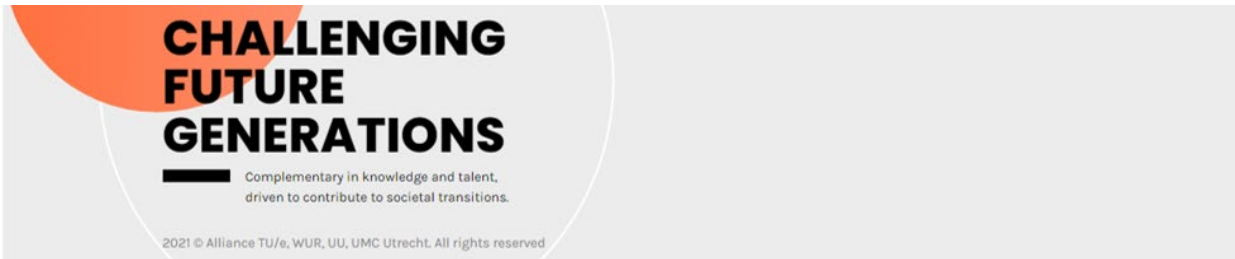


“Organising synergy between technological innovations, societal and organizational innovation to foster and accelerate the transition to more circular societies.”

This will be done by engaging novel conceptualisations for governance of socio-technical change, investigating potential distinct approaches and working towards 'deep demonstrations' which go beyond experimenting with individual solutions. The expected outcomes of this project will be co-creating capacities & reflexive approaches to navigate transformations towards circular cities.

Potential partners for collaboration identified for the project are the Mission Oriented Innovation Policy Observatory (UU), TIS (TU/e), WUR Observatory on urban development, AMS, Regional and Local authorities, TNO/Rathenau/PBL, etc.

Based on the feedback received, Jonas further aims to make the objective and methodology more concrete, with also a consideration of the role of businesses in novel governance.



10) Marian Stuiver: Deep dive inclusion- Inclusion in design & participation of green & circular cities
 (Programme Director Green Cities, WUR)

Marian realized that there is increasing attention for inclusion in design & participation of circular cities. However, to what extent it really helps is not clear. To address this challenge, she proposed a project with the idea of-

“Evaluating alliance projects on inclusion: the approach, results, and (un)intended impacts”

Marian aims to do this by developing design criteria for inclusion methodologies to improve the existing methods, design new approaches & monitor the impacts thereof. She envisions collaboration with all projects across the Alliance involving participatory approach.

Based on the feedback received, Marian will make the idea more concrete by finding cases and projects in the Alliance, and elaborating on the framework for studying inclusion. She also finds it interesting to include civic activism in technological projects.

Marian Stuiver WUR and Rianne Valkenburg, TU/e
 Int: Carolina Castaldi, UU

The project:

Evaluate current (alliance) projects on inclusion: the approach, the results and the (un)intended impact



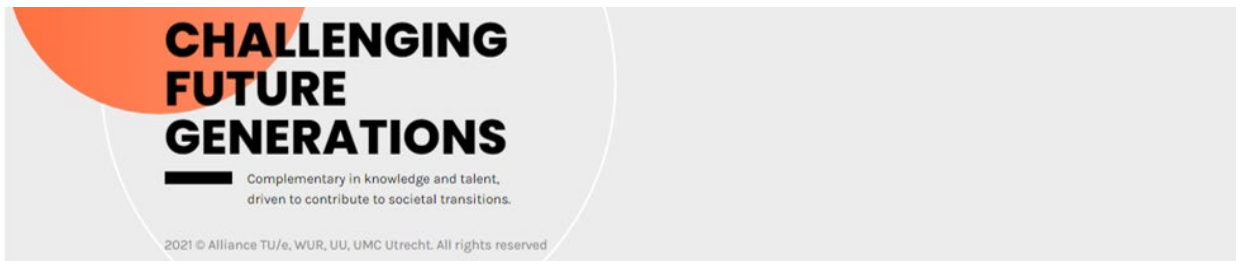
11) Helen Toxopeus: Greening together! Exploring coalition building & governance arrangements for co-founding urban nature-based solutions
(Assistant Professor of Business & sustainability at UU, researches Finance & business models for the circular economy & Urban nature-based solutions)

Helen identified that there are severe coordination problems that prevent cost-effectiveness of urban NBS to be realized. This is due to the fact that benefits are often scattered between public & private stakeholders and singular business models can lead to negative investment decisions. There is an opportunity in collaborative co-funding to overcome these challenges. Therefore, she proposed a project with the following main research question:

“What coalition building & government arrangements can drive collaborative funding for nature-based, inclusive cities?”

She aims to explore the role of unusual suspects such as insurance, finance, real estate in this project. Potential partners identified are Sustainable finance lab at UU, City Deal Openbare Ruimte, Community ‘Sociaal Circulair’ at Groene Brein, possibly WUR and UMCU, etc.





The key takeaways for Helen from the feedback were to explore when and why co-funding is indeed the solution; choose specific NBS, actors and scales to make the idea more concrete; and consider the role of citizens for inclusive finance.

Poll, Conclusion and Follow Up

The session concluded with a poll to get an first impression of which of the proposed projects were considered the most innovative, needed and feasible by the group.

In concluding remarks, Prof. Huub Rijnaarts and Prof. Chris Backes reflected on the sandpit session and appreciated the range of research ideas put forth across various disciplines. They also informed about the further selection process for the financial support offered via the Alliance and invited members to actively contribute in the future. To facilitate this a **Linked In group** has been established for which you can register here: [Working Group Circular Society, Alliance TUe, WUR, UU, UMC Utrecht | Groups | LinkedIn](#)

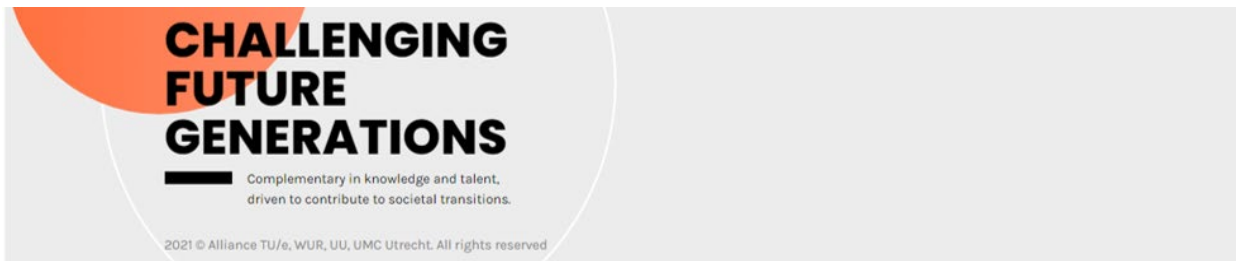
After the sandpit, the working group (Commission members: [Circular Society – Challenging Future Generations \(ewuu.nl\)](#)) jointly discussed and ranked all pitched ideas on the basis of six criteria: scientific quality, potential to collaborate with researches from other institutions in the alliance, methodology, link to the theme of CIC, expected outcome and impact and response in the discussion groups (sandpit).

The unanimous decision was to finance five grants and the recipients have been informed on the decision in the meantime. We are happy that four of the five recipients come from SSH faculties, illustrating the strong potential of SSH disciplines for interdisciplinary collaboration. The recipients of the grants have been requested to detail their proposal (deliverables and foreseen collaboration partners, especially from the alliance, and to provide information on how they will collaborate.

Recipients of Grants:

Katrin Merfeld (UU)	k.merfeld@uu.nl	Stakeholder Matchmaking – Platform business models for urban NBS
Torsten Schröder (TU/e)	t.w.a.schroeder@tue.nl	Accelerating the Circular Building Transformation
Marian Stuver (WUR)	marian.stuiver@wur.nl	Deep Dive Inclusion: Co-creating and implementing an Adaptive Inclusion Framework for green/circular cities
Heleen Toxopeus (UU)	h.s.toxopeus@uu.nl	Greening Together! Exploring coalition building and governance arrangements for co-funding of urban nature-based solutions
Daisy Yoo (TU/e)	d.yoo@tue.nl	New Ways of Co-Futuring Circular and Inclusive Cities

We congratulate the five winning researchers and are looking forward to their contributions! A new round of grants is planned for 2022. Please check our [site](#) for updates.



The working group agrees that the sandpit was a very successful first event by the Hub Circular and Inclusive Cities. It fully implemented all three functions it was meant for: being a platform where researchers from different institutions got to know each other, identifying complementary research ideas and activities and helping to prepare a decision on which projects should be financed with 'freed staff member grants'.

This sandpit was the second event organized by the Working Group Circular Society, the first Sandpit focused on Circular Hospitals. See here for our recent activities [Circular Society – Challenging Future Generations \(ewuu.nl\)](#)

We have created a group to facilitate networking: please visit LinkedIn: [Working Group Circular Society, Alliance TUe, WUR, UU, UMC Utrecht | Groups | LinkedIn](#)

Please Save the Date 16. September 2021

12.00 – 12.30 we will be presenting the state of play in our Working Group in a hybrid lunch meeting.

Use this link to join this meeting. In case this does not work, here the full link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YTI1NzZmZWEtNjhiNy00NGMxLTg1YjltYjdiZTI4ZDU1YTdj%40thread.v2/0?context=%7b%22Tid%22%3a%22d72758a0-a446-4e0f-a0aa-4bf95a4a10e7%22%2c%22Oid%22%3a%22df4635cc-e954-45d7-a3cc-20fc9c5a55d2%22%7d

for any questions about the working group please get in touch:

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