

## Circular@WUR: living within the planetary boundaries

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In April 2022 in Wageningen, The Netherlands, we held the first Circular@WUR conference. With experts from science, industry and policy we discussed how we can use circular concepts to stay within the planetary boundaries whilst respecting the social foundations, and which transition pathways we can use to reach that goal.

The conference used the representation of the Stockholm Resilience of the Sustainable Development Goals to organize the meeting around: Biosphere, Society, Economy and Partnerships. Keynotes, sessions and workshops were held around these four themes. Bringing pioneers together that work in these four pillars to devise routes that will speed up the transition to a circular, biobased and climate-smart society. Our keynote speakers: Hans Bruynickx (Executive Director of the European Environment Agency), Fabrizio Adani, (University of Milan), Frank Boons, (University of Manchester, Maastricht University), Jaqueline Cramer, (Utrecht University), Tom Arnold, (Ireland's Special Envoy on Food Systems) and Bas Eickhout (European Parliament) presented last developments and knowledge needs in their field of expertise.

During the conference different challenges were mentioned that need attention to enable the pathways. The approaches that were brought to the discussion table were different; from technological solutions for circular use of materials, to necessary changes to economic models. But also behavioral issues, potential trade-offs and needed policies were addressed. In the opening speech rector magnificus Prof. Arthur Mol of Wageningen University mentions that time is pressing and that the time has come for the world to speed up the transition to a circular society. Key issues that need attention are "How do we design circular systems? Which paths should we follow to make the transition? Which side effects, such as different lifestyles, do we need to take into account? And in what situations will 'linear' still be preferred in the future? One thing is for sure – the clock is ticking." In addition, it is clear we need to focus on more than only technical solutions. The socio-economic challenges and solutions need to be included to come to an acceptable and sustainable situation. Many solutions already exist, highlighted by many presentations at the conference. Yet to make the transition, implies that these solutions become part of our daily life and that circular behavior becomes the new normal throughout society, from household to farms to large industry and policy. The realisation that we will need to change from the linear society to a circular one was acknowledged by the conference attendees. Now the question arises how this realization will trickle down to the whole society.

At the end of the conference the insights of the conference were pooled together in a statement in which the attendees of the Circular@WUR conference 2022 agree that:

- The voice of future generations is pivotal for transitioning to a circular society
- The sunset of unsustainable production, behavior, consumption and policies requires as much attention as the sunrise of all sustainable, circular initiatives
- True change only happens when political priorities, society, policies and science communicate and align

- Communication barriers amongst disciplines and stakeholders hinder sustainable solutions

And agree to:

- Develop options for and stimulate cross sectoral partnerships to enhance circularity
- Explore broader welfare definitions, from “value” to “well-being” and “happiness”
- Develop targets and KPIs to evaluate year to year progress towards a circular society
- Assess all synergies and trade-offs of sustainable circular solutions, for current and ALSO for future generations

In this book of abstracts we, as organizers, are proud to present all contributions that were presented at the conference.