

GREEN DEAL – CIRULAR ECONOMY

AMSTERDAM UNIVERSITY OF APPLIED SCIENCES

Expertise | Research themes | Project examples | Amsterdam

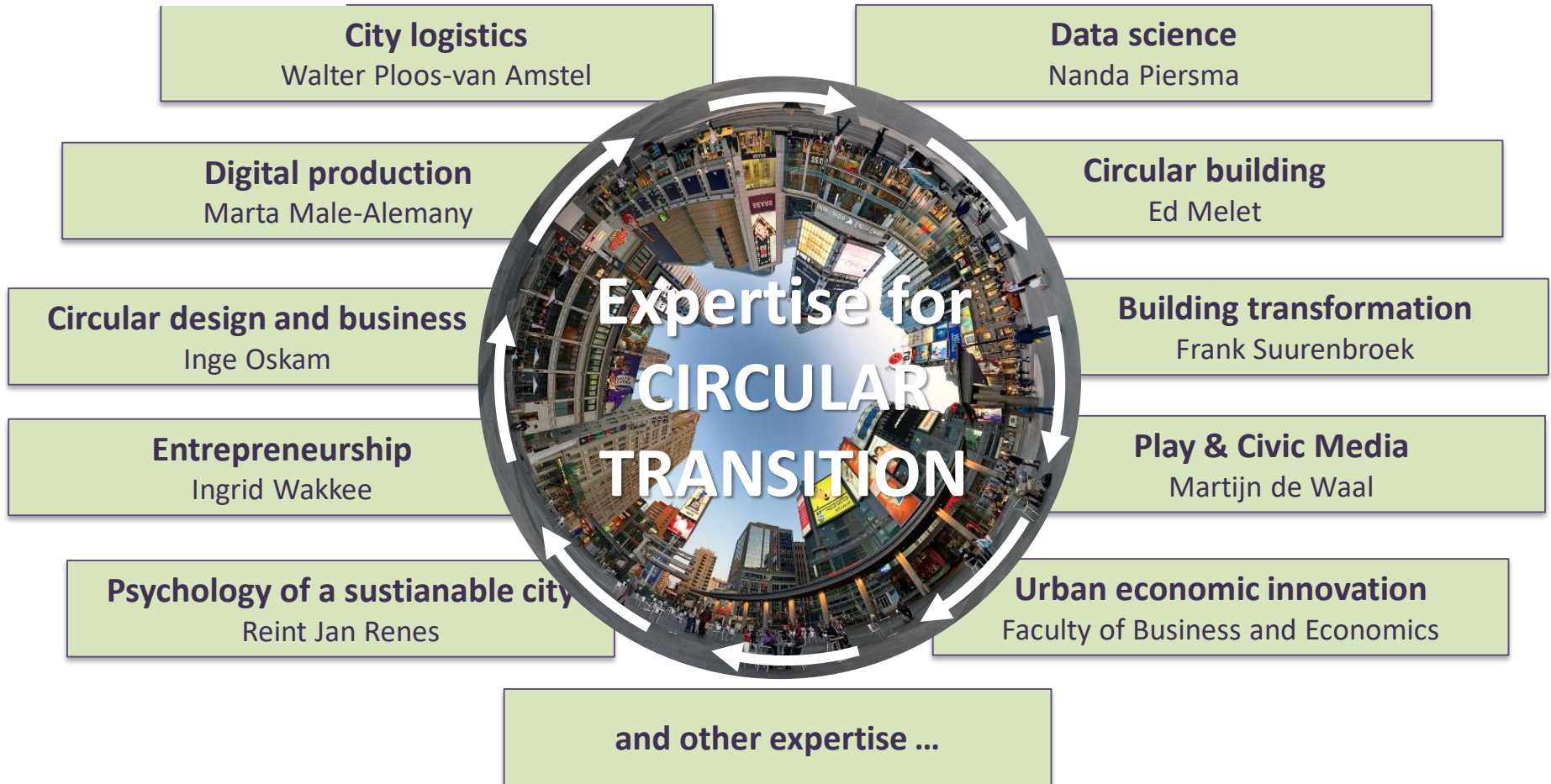
Inge Oskam

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CREATING TOMORROW



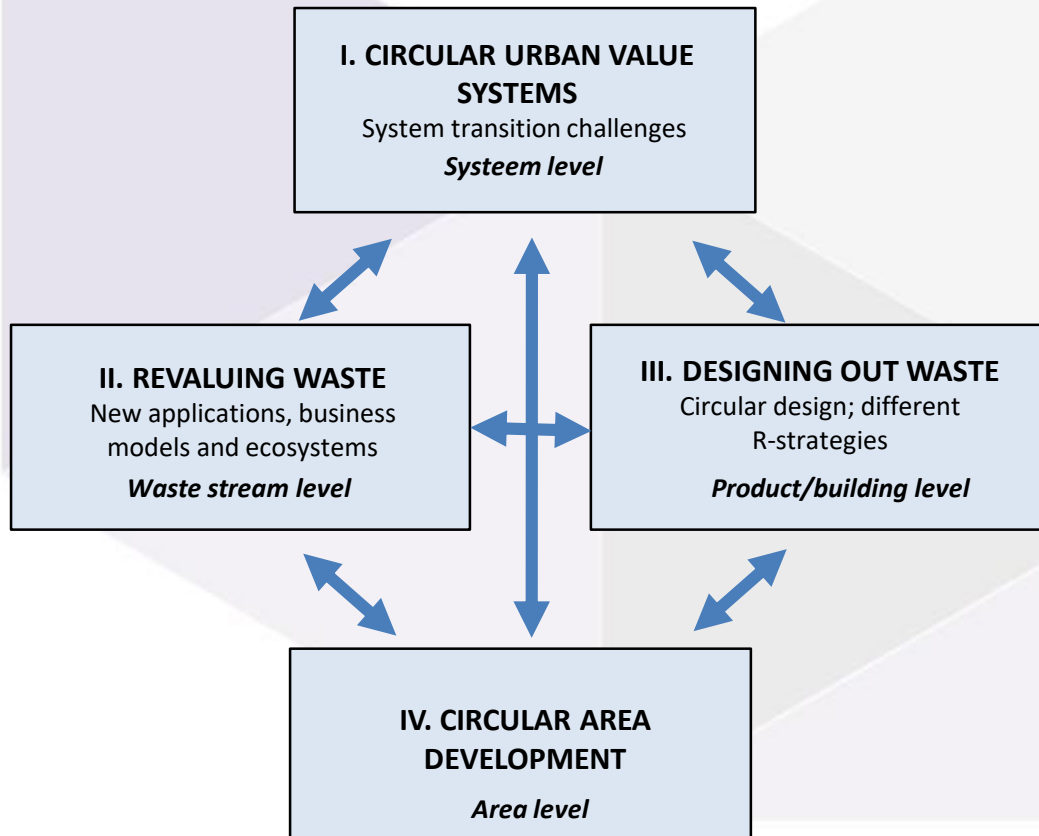
Centre of Expertise URBAN TECHNOLOGY



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CIRCULAR TRANSITION RESEARCH PROGRAMM

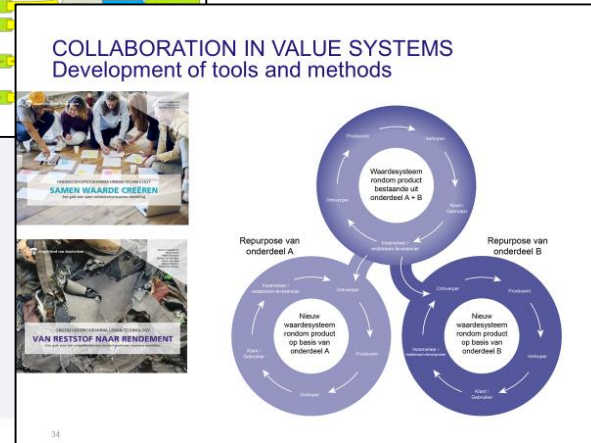
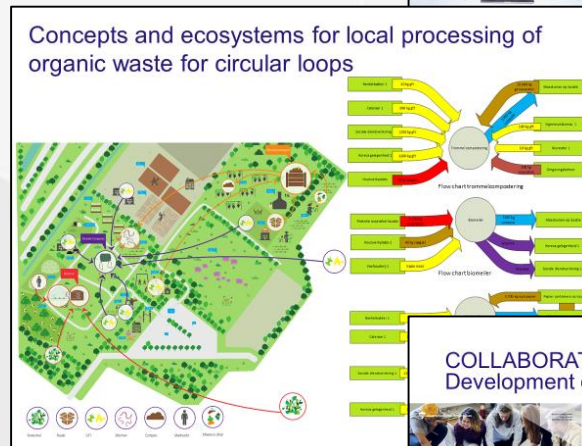
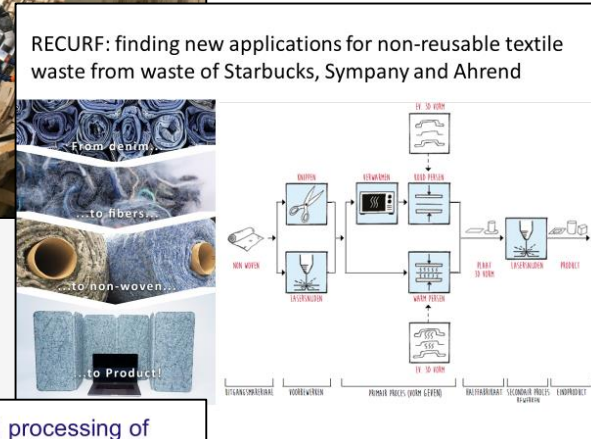
The **transition to a circular metropole** requires **integrated solutions** at different scale and system levels, as well as innovations that take a diverse set of stakeholders into account.



- Strong connection to the **Amsterdam metropolitan area**
- Close **collaboration with practice**: local governments, civil society organisations, (regional) companies, citizens and consumers.
- **Interdisciplinary research** from 4 faculties: business & economics, technology, applied psychology, digital media and creative industry
- **Approach and methods**: systems approach, living labs, case study research, applied design research, participatory methods, data science

**Over 40 applied research projects;
topics:**

- **Waste and reverse logistics** in cities
- **Circular product design** for high value reuse of waste in new materials, products and building
- **(Digital) technology** for local and small scale processing and production
- **Area development** for a circular economy
- **Behaviour and awareness** for seperated collection of waste
- Development of **circular business models**
- Cross sector collaboration and **innovation ecosystems**
- Assessment of **economic, ecological and social impact**



AMSTERDAM CIRCULAR AND LOW CARBON CITY

Targets

- Reduce primary materials use by 50% by 2030 and 100% circular by 2050.
- Cut CO2 emissions by 55% by 2030. Before 2050, decreased by 95% in comparison with 1990 levels.
- Focus: 1) construction, 2) biomass/food, and, 3) consumer goods

E.g. Consumer goods

- Prevent overconsumption and minimise the use of fast-moving consumer goods
- Stimulate high-value recycling of complex consumer goods
- Encourage the shared and long-term use of products
- Expand craftsmanship networks in neighbourhoods to repair and restore products
- Promote the creation and use of standardised and modular products to enable reuse, repair and recycling



Roles municipality:

- Direct financial support
- Fiscal frameworks
- Knowledge, advice and information
- Collaboration platforms and infrastructure
- Regulation
- Governance

The “Amsterdam Approach”

- Pioneering
- Learning by doing
- Stakeholder engagement
- Public-private partnerships
- Amsterdam donut

AMSTERDAM PILOT URBAN CIRCULAR RESOURCE CENTRE



Pilot

- Existing plan of a new bulky waste handling location to replace an existing site (greenfield)
- First centre in Amsterdam that will be transformed, with roll-out to other centres
- Experiments with different versions and locations of local resource points and experiments at already existing large-scale waste handling stations.

Next steps

- Elaboration of concept
- Consultation with stakeholders on concept and cooperation models
- Design and specs for UCRC and local points
- Opening 2021

Innovation

- More insight in technical infrastructures, logistics, production chains
- Increasing the role of private sector (manufacturing, re-use and recycling, creative industries, ..)
- New PPP and related business models identified and tested.
- Governance models
- Larger role for non-profit, civil society organisation as well as citizens)
- Optimise share and scope of resource centre in value chain
- Monitoring and evaluation contributing to the emerging logical framework (indicators) for urban circularity.
- Parallel with city-wide strategy development
- Sharing European experiences!

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