INN WFINANCING THE URBAN TRANSITION

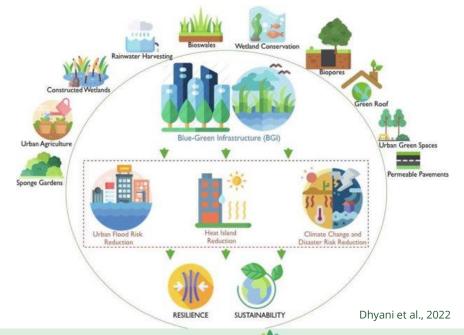


Nature based solutions

- an effective and efficient way to protect, sustainably manage, and restore natural and modified ecosystems
- built at different scales
- result in multiple co-benefits for health, the economy, society and the environment
- generate widespread public benefits but do not produce immediate revenue streams to support the high costs they often entail. (Mayor et al., 2021)

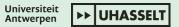


Seddon et al., 2021













An investment gap

- Investment in modern, smart and clean infrastructure in the next decade is a critical factor for sustainable economic growth. (OECD, 2017)
- Despite the needs, public sector investment is not following suit.
- The investment gap is particularly high for green and blue infrastructure, which typically rely on public budgets. (den Heijer and Coppens, 2023; Mell, 2018; Merk et al., 2012)
- A lot of potential private investment resources might be available.
- The key question is how to mobilize private capital to build NBS infrastructure.



Public Interest Research Centre, 2011



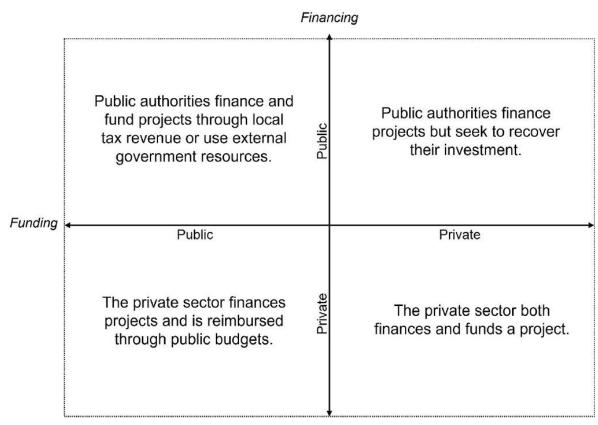






In search of innovative financing instruments

- Alternative instruments draw on financial resources other than public budgets collected through tax generation (den Heijer and Coppens, 2023)
- Mainstreaming the involvement of private capital requires parallel scientific innovations and deeply interrelated breakthroughs in different disciplines



Typology of financial models, den Heijer and Coppens, 2023

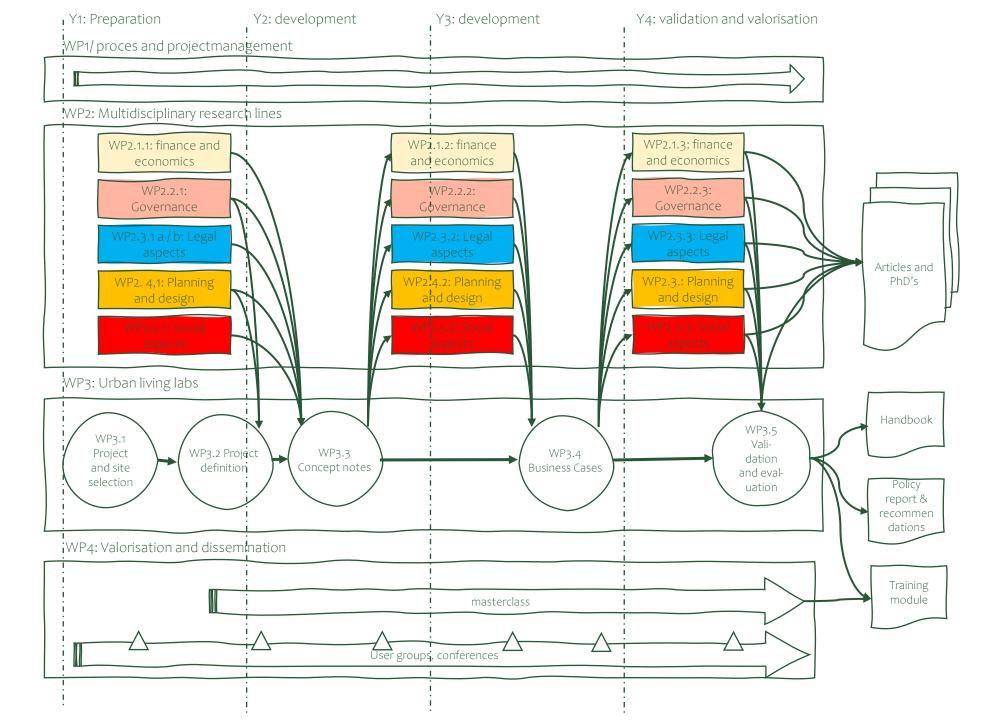


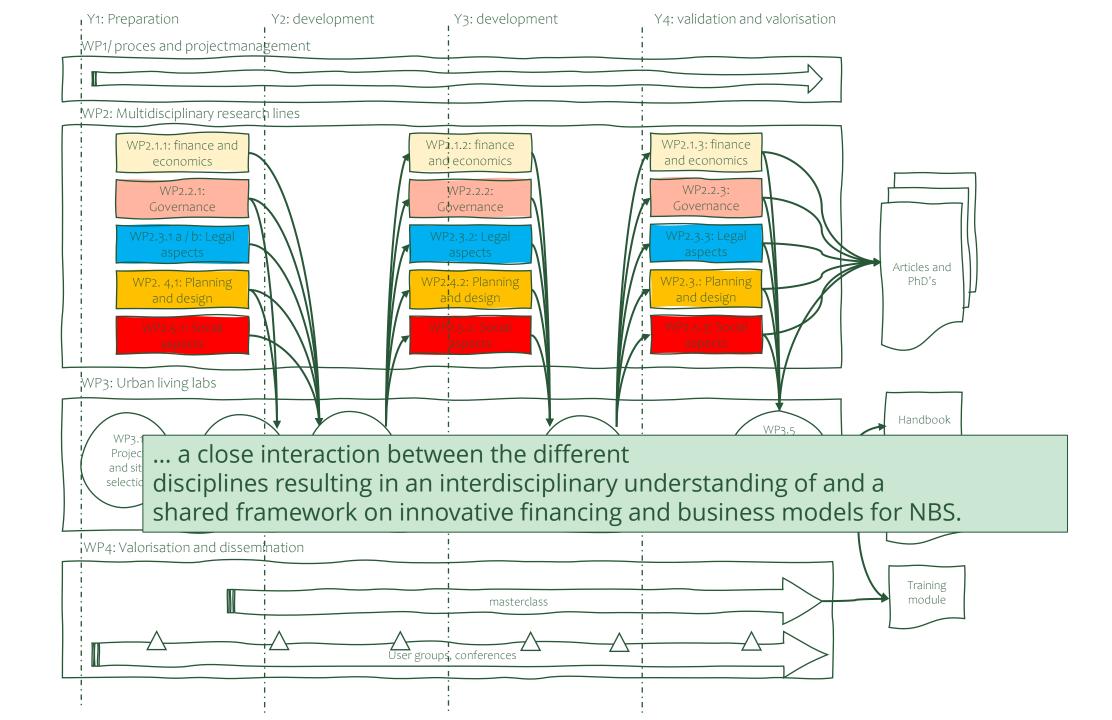








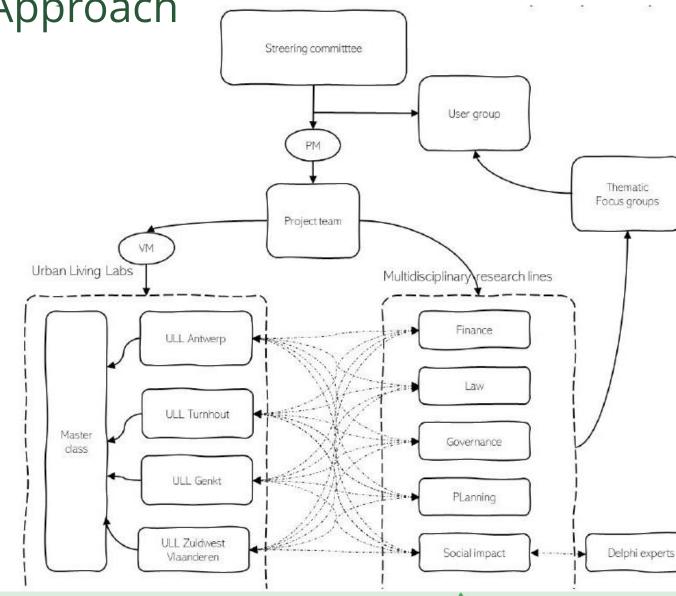




Transdisciplinary Living Lab Approach

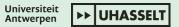
- User-centered and open innovation ecosystem services
- Integrates research and innovation processes in real life settings
- Confronts stakeholders with the actual and future challenges of a specific site
- Triggers discussions relating general understanding of the research theme in relation to policy issues
- Allows different urban actors to design, test and learn from innovations

European network of Living labs, https://enoll.org/; Martinez-Bello et al., 2021

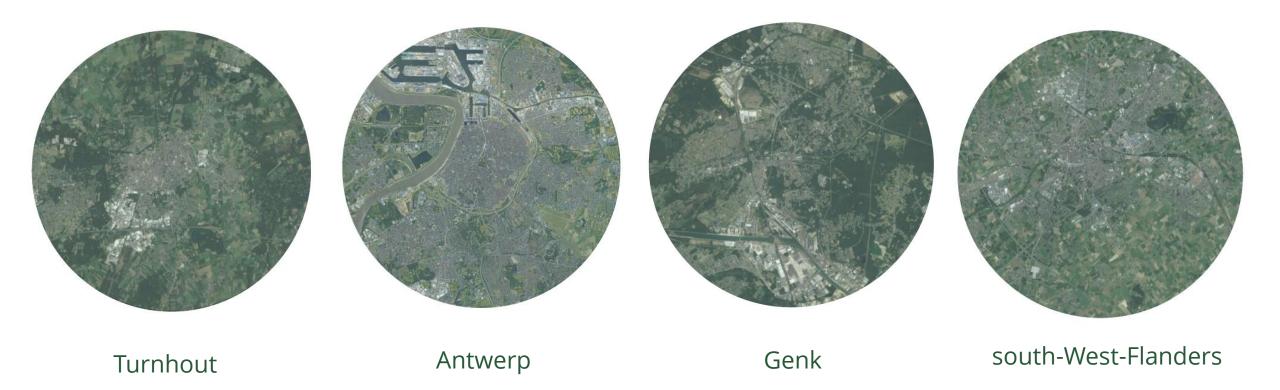








4 Urban Living Labs









Living Lab Turnhout

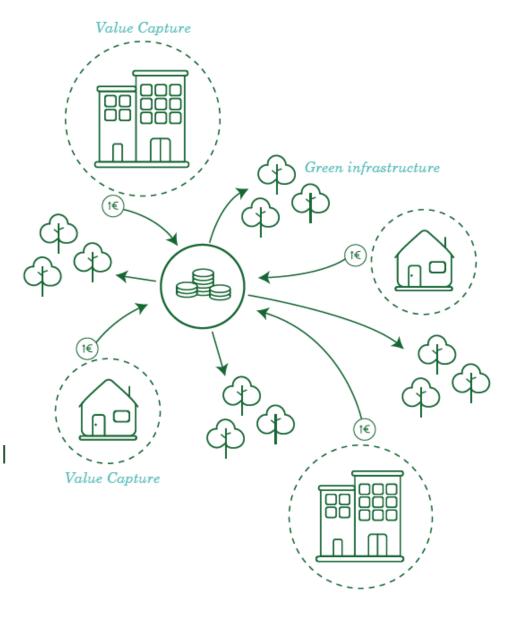
How to generate income for the implementation of NBS, for plan compensation to prevent further urban sprawl and/ or for the purchase of land?

NBS: strengthening and protecting green structures in the city as planned by the Turnhout Climate Plan

Instrument: Value capture

Looking at different types of taxes and fees to capture capital gains

Scaling up to region formation







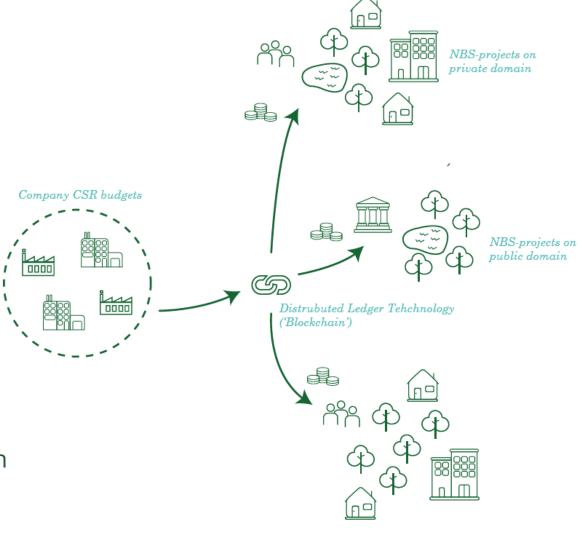
Living Lab Antwerp

How to attract private funding in the light of scaling existing and new NBS initiatives?

NBS: blue and green infrastructures as planned by the Antwerp Green, Water and Climate Plan

Instrument: Blockchain platform based on distributed ledger technology combined with smart contracts, artificial intelligence and internet of things

Use of corporate social responsibility budgets to invest in local NBS-projects by companies localised in Antwerp







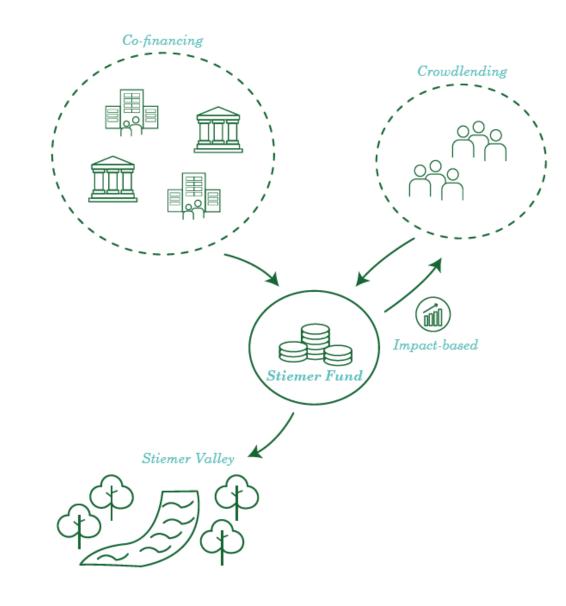
Living Lab Genk

How to support the complexity and integrated approach by means of innovative financing?

NBS: transformation of the Stiemerbeek valley based on an integrated spatial vision of the Stiemer Valley Master Plan

Instrument: Stiemer Fund as a combination of

- structural co-financing by the (semi-)public partners involved
- impact-based crowd lending involving local citizens and firms









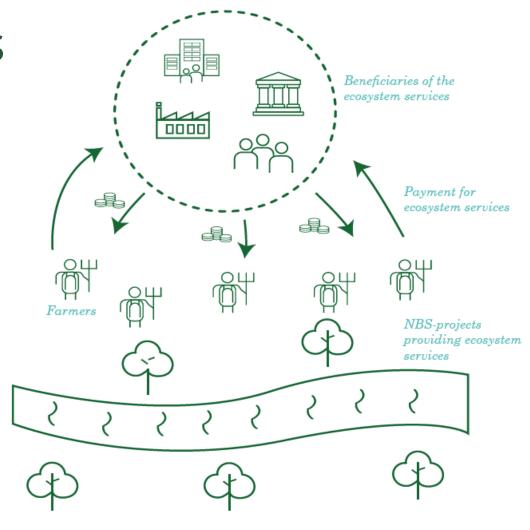
Living Lab south-West-Flanders

How to link beneficiaries (businesses, citizens, farmers, recreationists, ...) of the ecosystem service 'water storage' to providers (often farmers)

NBS: area-specific measures in function of a climaterobust landscape based on the Open Ruimteplan Interfluvium

Instrument: Payment for ecosystem services (PES) - a voluntary agreement between providers and payers of ecosystem services

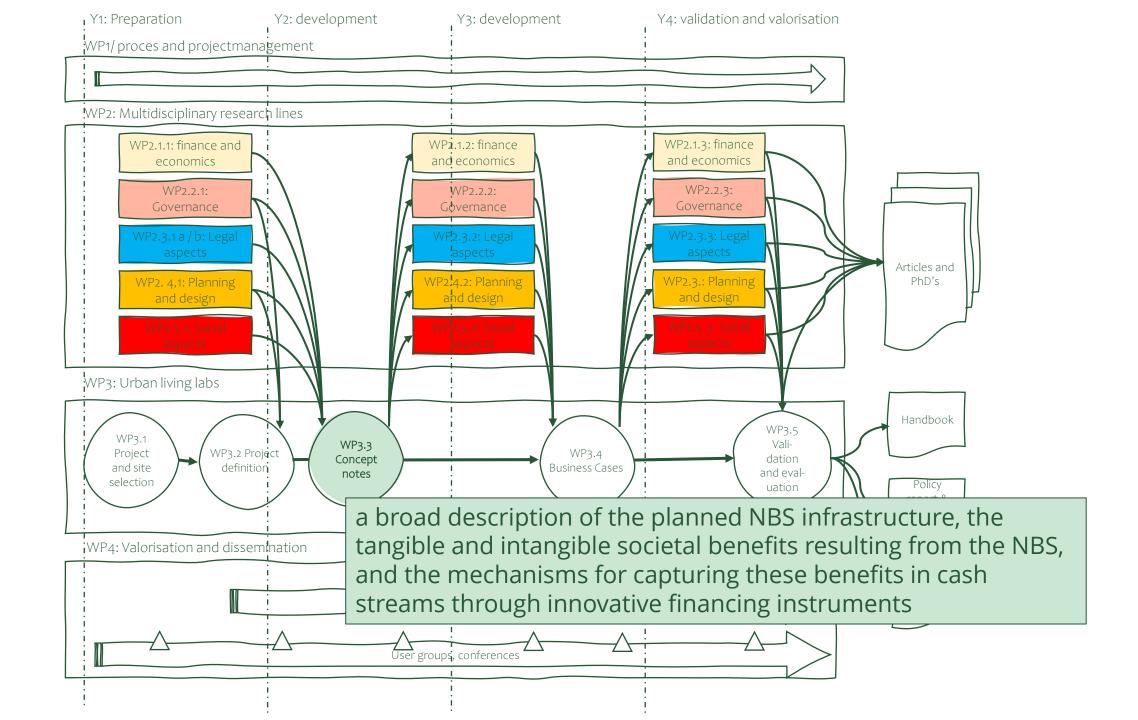
Comparison to traditional system of management agreements and ecoschemes











Stakeholder consultations



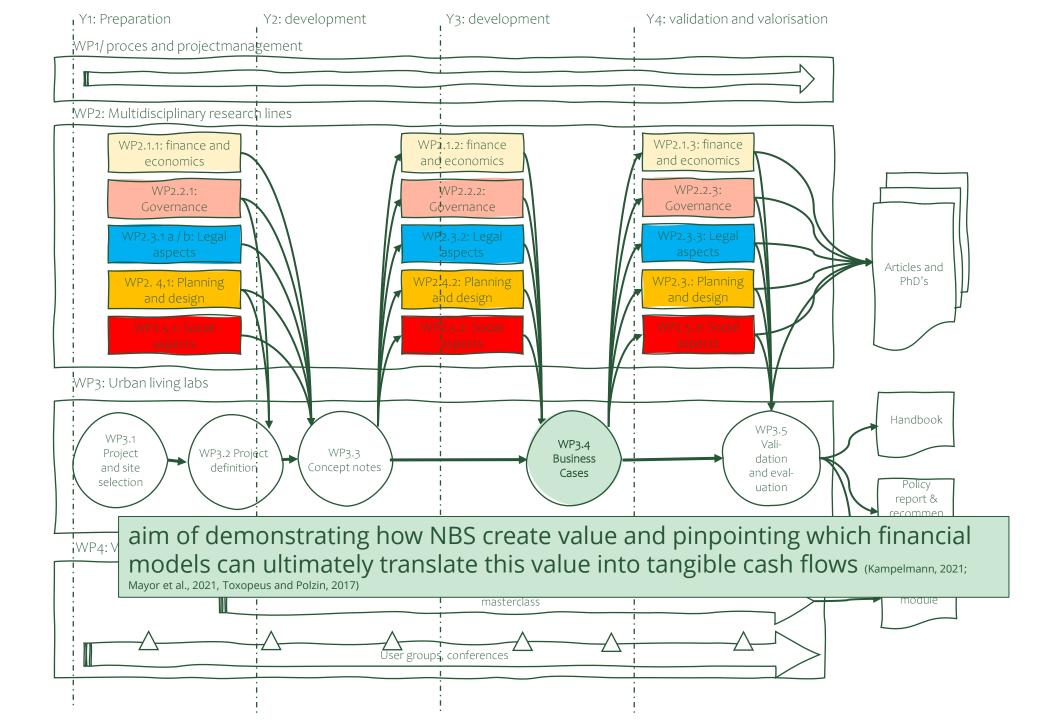


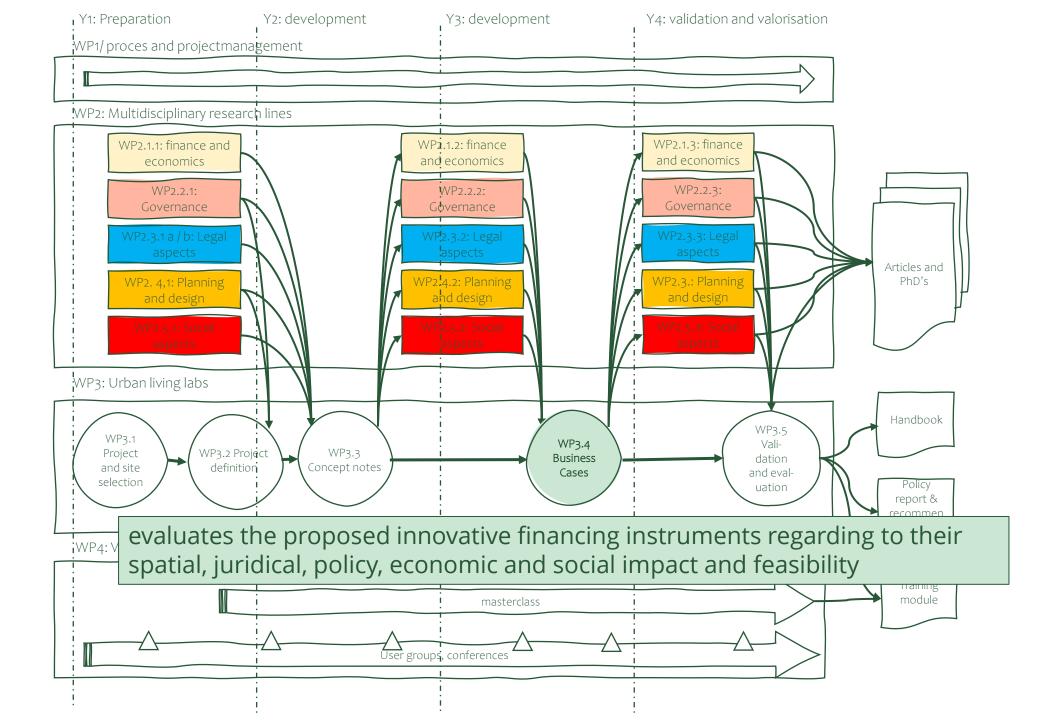


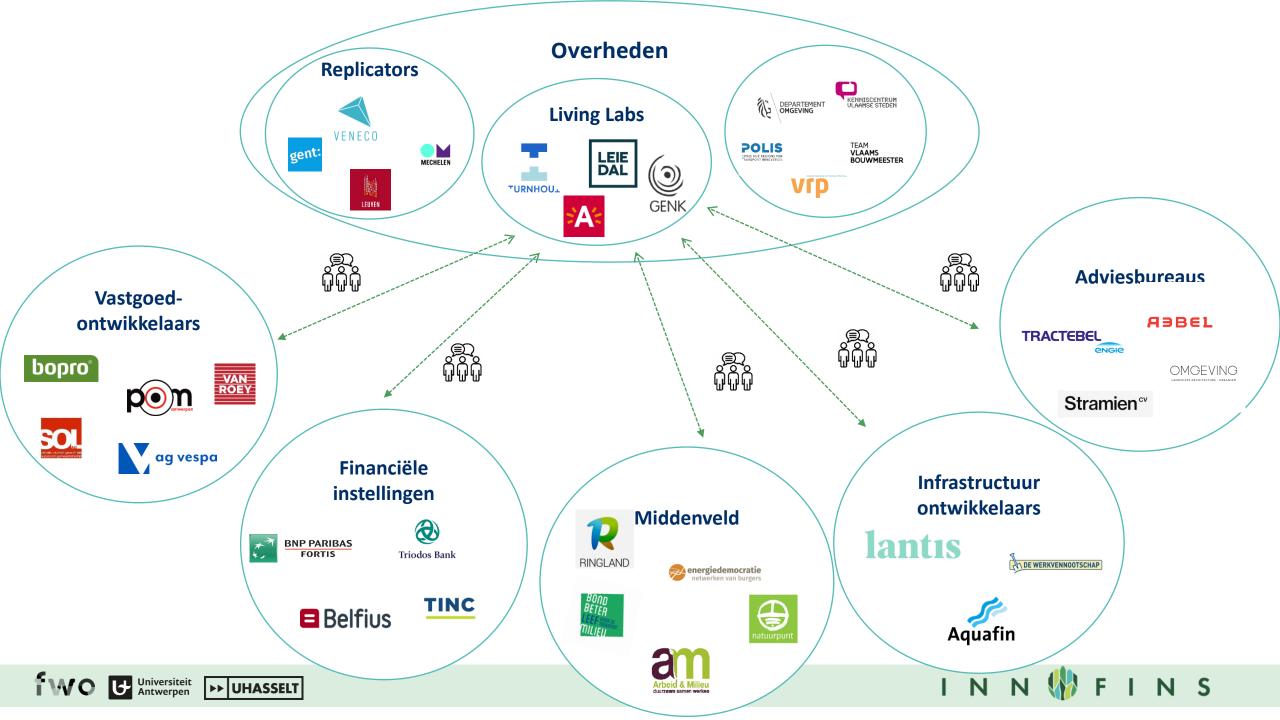




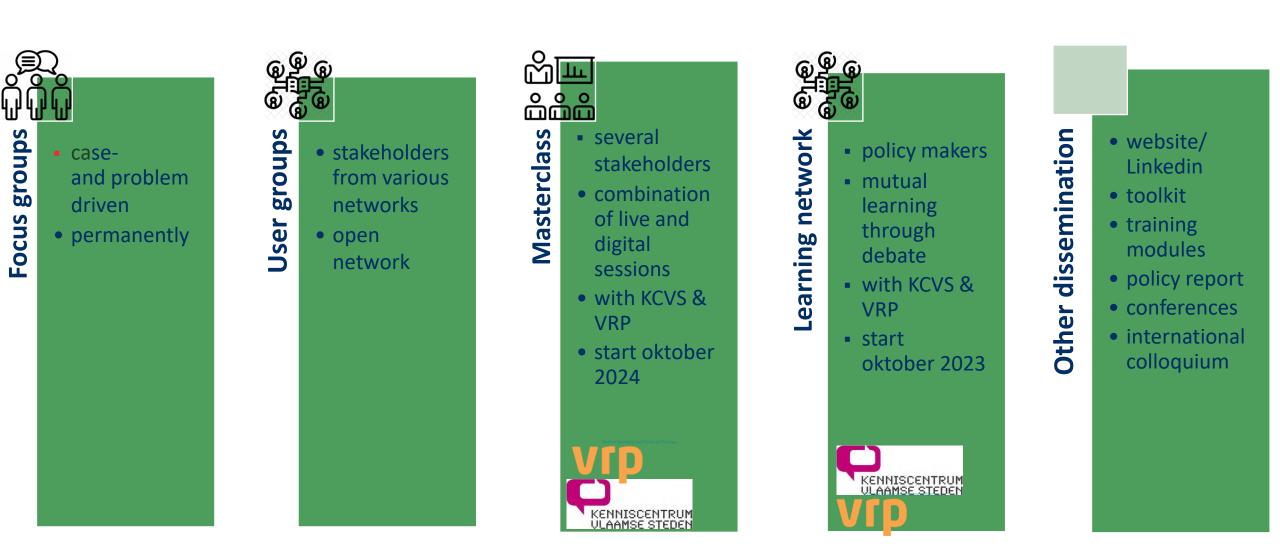








A broad and differentiated outreach to stakeholders and users









INNW FINS

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