CIRCULAR BIOECONOMY IN GELDERLAND AND Biomass (Carbon) OVERIJSSEL Raw ma OVERIJSSEL

A study about the fitness of the sectors construction, plastic, textile and chemical regarding the entrepreneurial ecosystem to create a circular bioeconomy in the East of The Netherlands.

RESEARCH AIM & QUESTION

Target of EU & NL to
achieve a 100% circular
economy by 2050.

5 national transition points:
- Biomass & food
- Manufacturing (chemical)
- Customer goods (textile)
- Plastics
- Construction

Use biomass to achieve a circular bioeconomy in the other five sectors.

Currently focus on creating a cluster for CBE on one sector.
 Currently focus on energy and protein for food and relative low amount of research in other sectors.

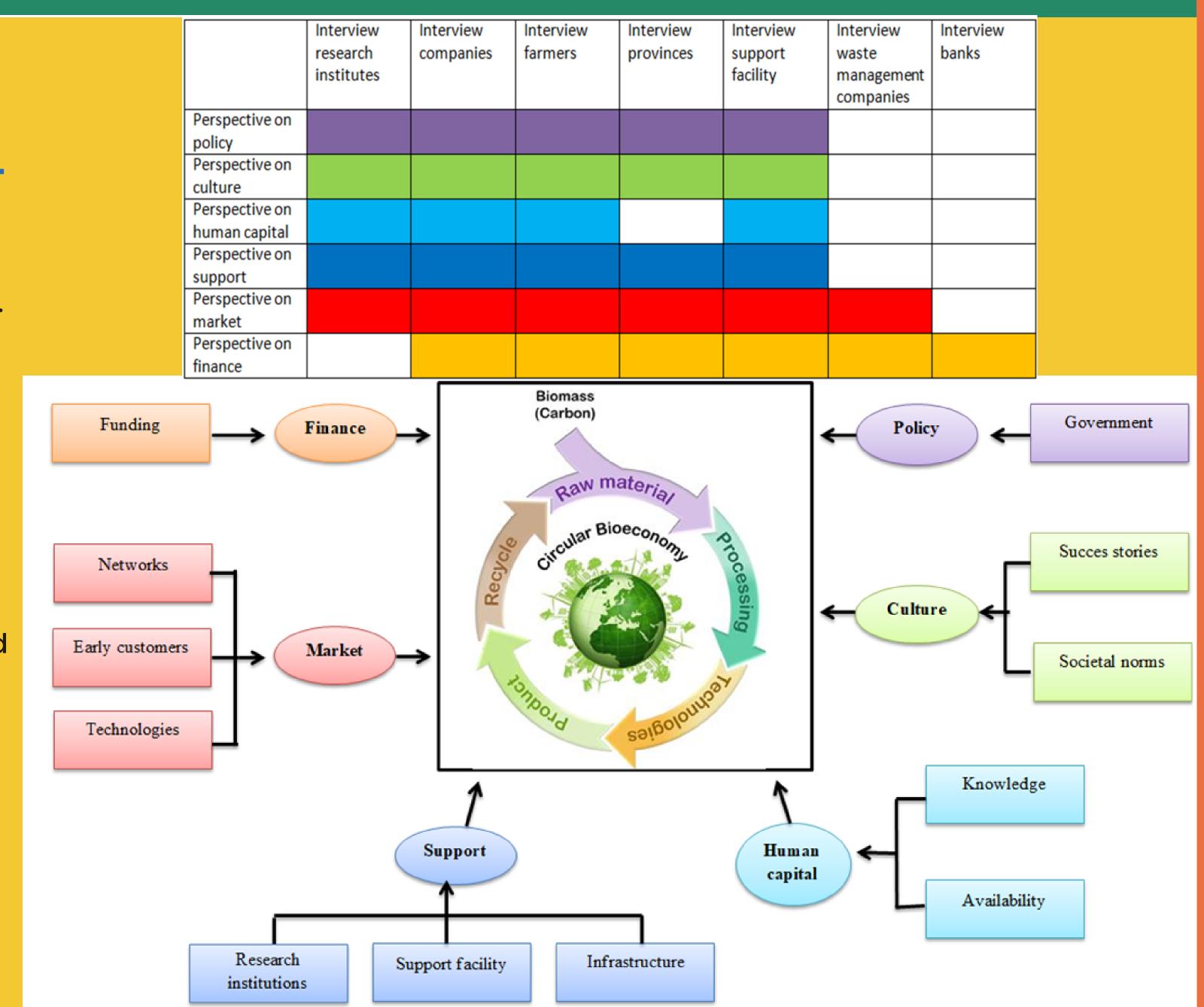
Gaps in literature:

 Global inventory is missing, because of the start-up phase of biomass companies in East of The Netherlands.

"What is the fitness of the key sectors for the implementation of an entrepreneurial ecosystem to create a circular bioeconomy in the East of The Netherlands?"

METHODOLOGICAL APPROACH

- Qualitative research with a multiple-case study design.
- The cases: plastic, construction, textile and chemical sector.
- Availability sampling.
- The perspective of each component is at least mentioned in 8 in-dept interviews.
- 24 interviews are conducted in total.
- Appropriateness and consistency is ensured with semi-structured interviews, interview pilots and a member check.



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Oost NL

This research is conducted for the company Oost NL. Development agency Oost NL strengthens the regional economy on behalf of the provinces of Gelderland and Overijssel and the ministery of Economic Affairs and Climate by advising SMEs on sustainable innovation and investment.

RESULTS & DISCUSSION

• Same biomass streams can be used for different sectors.

	Construction	Plastic	Textile	Chemical
Policy	Barrier	Driver	Barrier	Barrier
Culture	Both	Barrier	Barrier	Barrier
Human Capital	Barrier	Barrier	Barrier	Barrier
Support	Barrier	Driver	Barrier	Barrier
Market	Barrier	Barrier	Barrier	Barrier
Finance	Barrier	Barrier	Both	Both

CONCLUSION

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RECOMMENDATION

East Netherlands

Development Agency

From pioneers phase to next phase:

- Establish a policy roadmap per sector with clear targets for 2030 and 2050.
- Provinces should cooperate more with each other.
- Establish an industry to create larger supply chains.
 Farmers get the chance to establish themselves.
 Companies have a guaranteed supply and economy of scales, which results in cheaper biobased products on the market. Oost NL can help with this by netwerking.
- Oost NL can support start-ups to growth to scaleups by developing a new funding program.

Contributions to theory

- Contribution to currently relative low amount of research about biomass on the key sectors.
- Contribution to current research by investigating the opportunities of creating a CBE with multiple sectors instead of one.

Contributions to Oost NL

- Connection between department food and circular economy.
- Recommendation about the fitness
 of the key sectors and how Oost NL
 can facilitate in scaling the
 opportunities up and lowering the
 barriers to create an EE and CBE in
 the East of The Netherlands.

Contributions to society

- A step closer towards an EE and CBE in the East of The Netherlands.
- Sectors can learn from each other and cooperate together to create a

