

Biobased economy and Chemistry

Ample opportunities for the South-Eastern region of Drenthe (and Northern Netherlands)

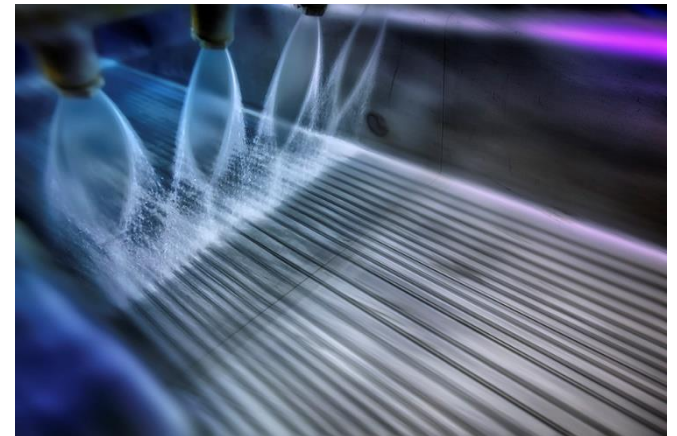
Roel Folkersma *Program Manager BBE*

Main objectives

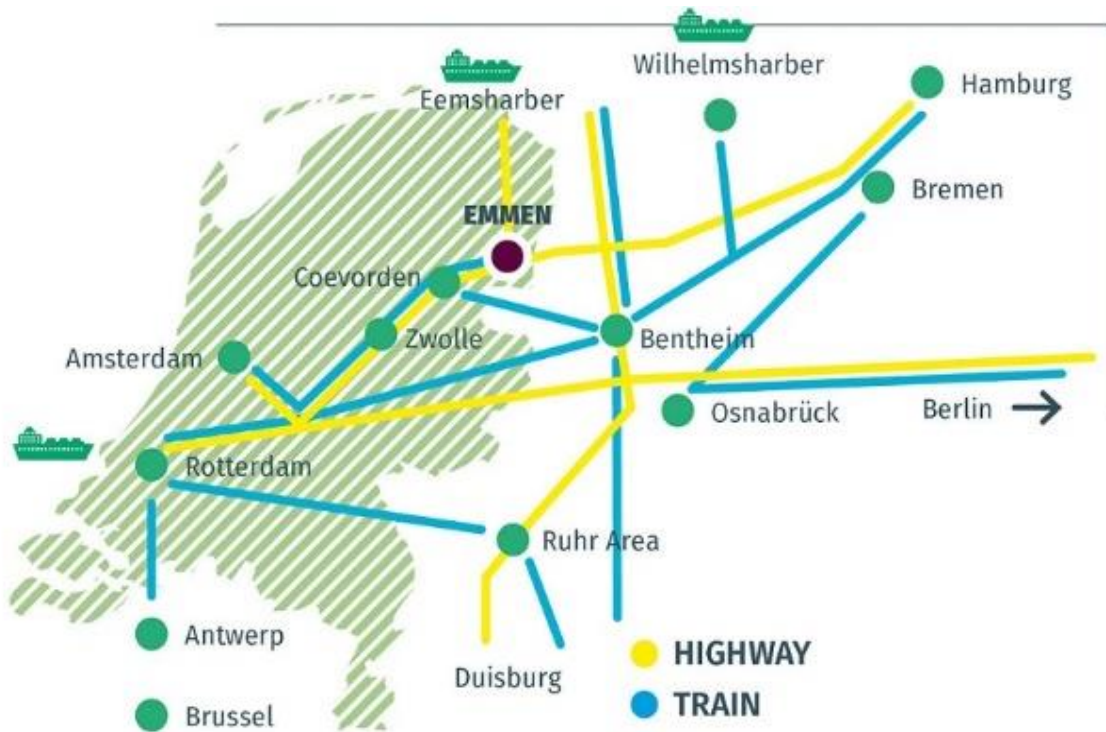
- Boost employment opportunities
- Creating an Ecosystem biobased economy and green chemistry
- Creating an innovative climate

By stimulating:

- The offering of a TaskForce for the SME's
- A better match between the demand of the labour market and educational facilities
- New kinds of business and employment



Logistic hotspot



Knowledge & Innovation



Why is biobased economy so promising in the South Eastern region of Drenthe

Firstly because of the sheer presence of the Chemical, horticultural and agricultural sector.

Secondly because of the obtained national status of the Center of Open Chemical Innovation (COCI) by the Top Sector Chemistry.

Thirdly, the formation of niche- and new markets for innovations in the chemical and horticultural sector.



What do we need?



Successful Businesses

- Market potential (Chemport Europe)
- Knowledge & Educational facilities, Greenpac (Stenden University),
- Center of Innovative Craftmanship (=Intermediate Vocational Education)
- Enthusiastic entrepreneurs

Dynamic network of entrepreneurs

- An innovation and business network (SUSPACC.NL)
- Innovation-managers and business-developers (Task Force)

Open space for Innovations

- Testing facilities & Living Labs (private and public)

Communication and Network

- Connected with BIC (as SUSPACC) and ERRIN (as government)
- Active and reactive communication

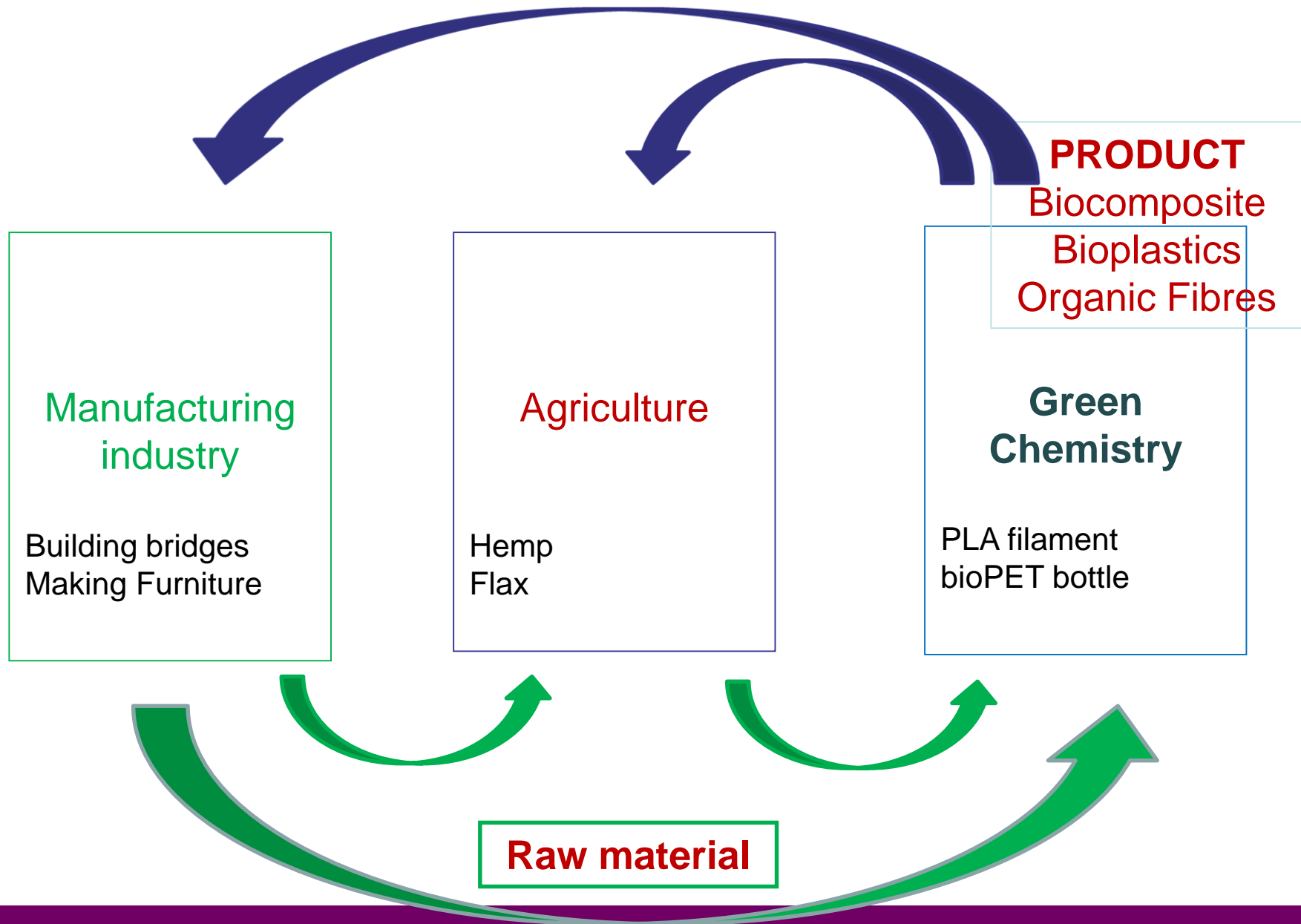
Triple Helix cooperation: using the metaphor of gear wheels



Government's role (1) :

- ❑ Initiate: start a proces of networking, business oriented. It must be triple helix cooperation. *It's all about PEOPLE! And the power of networking.*
- ❑ Put on the agenda: you can reach a win-win situation working together in business and innovation. It is important which philosophy is used : thinking in chains (supply chain and value chain), crossovers and partners;
- ❑ Connect/link: connecting/linking companies with educational facilities and the government; each in their own role.
- ❑ Supporting: Task Force capacity, communication, investing in knowledge and cofinancing projects and business cases.

Connecting sectors



Which concrete results can we expect in the coming years:

Results Green Chemistry: in the years 2016 – 2020 (source ERAC):

- 30 new jobs yearly; thus 300 jobs within 10 years
 - Over 30 fte structural and additional research jobs in (green/organic) plastics, fibres, composite and manufacturing research
 - Over 250 students will have performed high tech research by the end of 2020
 - 30-50 valorisation projects between the period 2016 – 2020.
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Examples

- Yarns for tomato- and cucumber cultivation
- 3D-printing
- Bio-composite bridge
- 100% bioPET
- And much more!



BIOBRUG

Samenwerking tussen Machinefabriek Emmen, CTC en Green PAC



CIRCULAIR BIOBASED WORKPLACE 2020

Samenwerking tussen Drentea en Green PAC



BIOPET100

Samenwerking tussen Cumapol, BioBTX, Syncom, Sunoil, Dufor, Aarts Plastic, Stenden, RUG en API



COCI-location: Emtecc Industry & Businesspark



European cooperation - partners

- In our own region: *Green PAC (partnership cities of Emmen and Zwolle, SUSPACC (green chemistry business network, partner of BIC)*
 - In the Northern Netherlands: Chemport Europe, BERNN (Bio Economy Region Northern Netherlands, Biocooperative (network organisation) *(with various companies and educational institutions as stakeholder)*
 - International (EU / German networks, Faser Institut Bremen, Fachhochschule Osnabruck, 3N Knowledge Center) and a lot of companies.
 - *Cooperation in a Agrobiopolymers project (Interreg-Germany)*
 - We are member of Biobased Industry Consortium (By SUSPACC)
 - We are member of ERRIN
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European cooperation – are we ready?

Yes we are!

- We already work together in Europe with some partners and networks.

What do we need and what is available?

- (enlarge) Knowledge infrastructure (Intermediate – Higher – University)
 - Make connections – (challenge 1) with more specific regions
 - Form chains – (challenge 2) today for a much wider region
 - (more) Innovation coaches and business developers
 - (enlarge) Facilities (esp. demo- and pilotplants)
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Discussion about Government's role - remarks

- Don't start something if it doesn't look promising; but what is promising and what not?? One argument: the entrepreneur needs to really want it!!
 - The entrepreneur is in the driver's seat; stick to our tasks, the aim is not to take over the entrepreneurs place.
 - We don't subsidize companies, although we subsidize innovation projects and business cases. However we do wish to facilitate and unburden where we can;
 - Money is sometimes restrictive; how can we make the funds more accessible to SMEs?
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