

Session: Welcome and Opening  
Presentation by: Raimo van der Linden, *REWIN West-Brabant*

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Title: **BPM pilot ringopening polymerisation**

Author: **Raimo van der Linden**

Contact details:

Raimo van der Linden  
Projectmanager Biobased Economy  
REWIN West-Brabant  
Cosunpark 22  
4814 ND Breda  
The Netherlands  
T + 31 6 309 636 95  
E r.vanderlinden@rewin.nl



Curriculum:

Raimo van der Linden is a chemical engineer, currently working as business developer biobased at REWIN, which is the regional development agency for West-Brabant, the Netherlands. At REWIN, he helps businesses in commercializing biobased innovations, by connecting them to new partners, knowledge and subsidies. He is currently working on the development of a pilot plant for the production of novel biobased polymers, as well as a fieldlab for pyrolysis and the BioLinX project which assists EU-funded projects in commercializing their innovations.

Before starting at REWIN nearly 2 years ago, Raimo worked for 8 years in project management and conceptual process design in the field of biorefining and biobased processes at the Energy research Centre of the Netherlands (ECN).

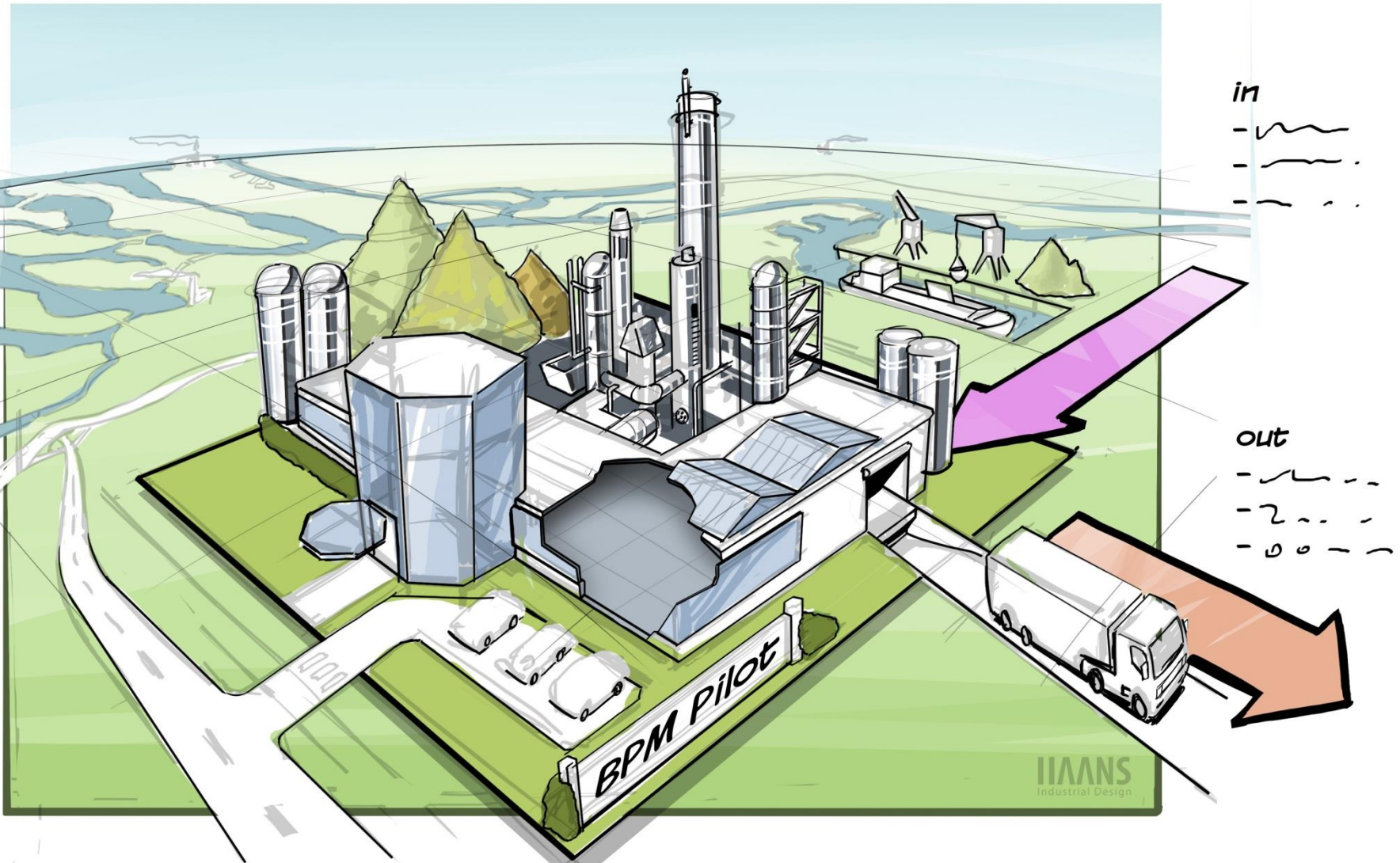
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Abstract:

REWIN, Synbra and WUR are working on the realization of a multi-functional pilot facility for the scale up of ring opening polymerization processes. The pilot facility should fill a gap that currently exists and that slows down the commercialization of new biobased materials. The costs of the project have been determined and a consortium is forming. The pilot facility will be built in Etten-Leur, so that the existing permit and operators of Synbra can be used to lower the costs. The facility will be a separate legal entity with its own entrance and address to ensure the safety of the IP of the users. Multiple ways of financing the pilot facility are being investigated at this moment. The consortium is open for interested partners.

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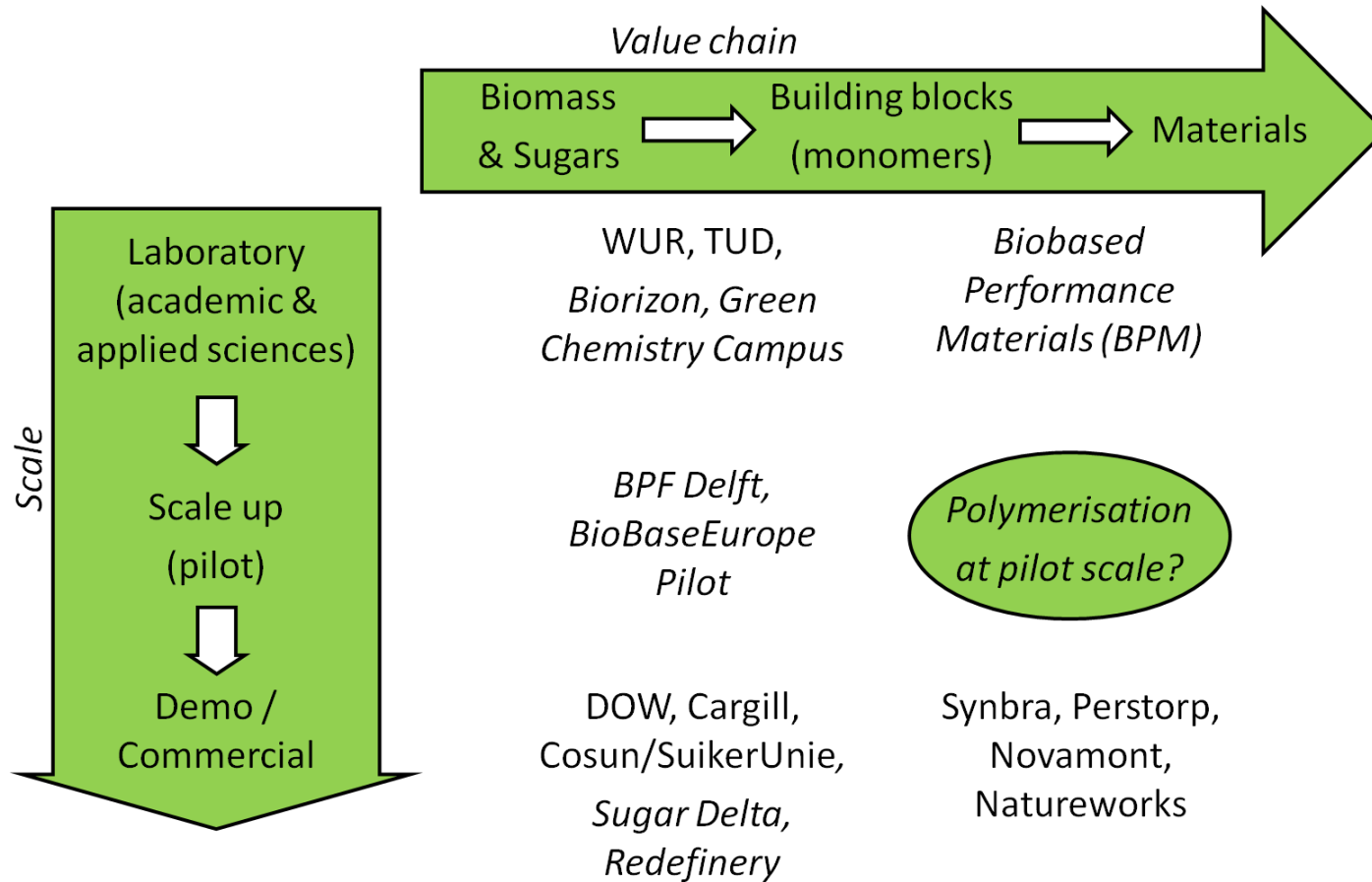
# BPM pilot ringopening polymerisation



# History project

- Initiators
  - REWIN
  - Wageningen UR - Food & Biobased Research
  - Synbra Technology
- General need identified for monomer valorization
- No public pilot facility available for scale up

# Current eco-system



## The plan

- Develop a pilot plant for ring opening polymerization
  - Validation of technology of new polymerization
  - Production of sufficient material for application tests
- Use of operating permit and operators of Synbra, Etten-Leur
- But: Separate site (different address), independent organization!

## Business case

- CAPEX / OPEX of the pilot determined
  - CAPEX: 2.9 M€
  - OPEX: 650 k€ / yr
- Test will typically take 3 weeks:
  - 1 week preparation
  - 1 week operational
  - 1 week after-care and cleanup
- Financial engineering ongoing
  - Cases with / without subsidy

## Reduce costs for users

- Ongoing discussion: What is the value of a pilot for the eco-system?
- No subsidy, all costs for users:
  - 1 test (3 weeks) costs 110 k€
- 50% subsidy on CAPEX & OPEX:
  - 1 test (3 weeks) costs 56 k€

## Status

- 5 Large companies have concrete interest
- 10+ SMEs from the region have interest
- Already discussion on expansion: other types of polymerization
- Looking for more interested parties



- Regional development agency for West-Brabant
  - Logistics
  - Maintenance
  - Biobased Economy
- REWIN connects companies to new partners, and helps to set up new consortia
  - Commercialization of innovations
  - Connect to triple helix: academia, government and companies

**Thank you**

Thank you for your attention!

Raimo van der Linden  
REWIN

[r.vanderlinden@rewin.nl](mailto:r.vanderlinden@rewin.nl)

+31-6 309 636 95