

The North of The Netherlands – MDR in Biobased Economy and Green Chemistry Brussels, 14 September 2017



Some economic characteristics of the North of The Netherlands

- 125.000 companies (99% SME)
- 454.000 employees
- Production value € 65 bln.
- 30% of Dutch agricultural land
- Major agro industry players (Campina, Cosun, Avebe)
- Chemical sector 2 clusters

Identified investment projects & opportunities

Projects

Value chain 1: Sugars to building blocks

Mobile demo/production plant for grass refining.

Factory for producing bio acidic acid from C₅ and C₆ Sugars.

Value chain 2: Fibers to composites and polymers

Sugar beet pulp refinery

Wet organic biorefinery

PHA demo

Natural fiber valley

Value chain 3: waste to chemicals

Bio-syngas production unit and bio-methanol.

Pilot for BioBTX

Chemical PET recycling

Sustainable Chemicals Delfzijl

Algae production for food and feed purposes from flue gas.

Factory for production of bio-propylene glycol.

Factory for production of glycerine based products.

Launching customers for new biobased and circular products

Production of biologically degradable trimmer wire and 3-d monofilaments

Production of bio-based furniture.

Production of bio-diesel from animal fats.

Moulding bio-based materials.

Moulded Fibre

Barriers for investments in value chains

- 1. Financing of Demo and first-of-a kind large scale plants**
- 2. Launching customers**
- 3. Cross-sectoral regional co-operation in the value chain**
- 4. Policy and regulation to improve market opportunities for BBE products.**

⇒ **Barrier 1, 2 en 3 potential direct role for the region**

⇒ **Barrier 4 a possible acting/ agenda setting role for the region**

Policy measures to take away barriers

- 1. Industry-driven use of subsidies- and investment schemes**
- 2. Sustainable procurement of BBE products regional produced**
- 3. Sustainable Chemical Fund - financing large scale projects.**
- 4. A triple-helix governance model with:**
 - industry more in the lead is,**
 - a cross sectoral set up**
 - focus on (facilitating) investments in regional value chains**
- 5. Improve acquisitions from outside parties based on a good benchmark of the N-NL region with its specific strengths.**
- 6. Involvement of European industries as launching customers for products/innovations from N-NL.**