The biobased economy in the Ghent region: Opportunities and challenges



Linda Verdonck & Sofie Dobbelaere

14/09/2017





RODENHUIZEDOK Biorefinery Cluster



The largest integrated production site for bio-energy in Europe:

Alco Biofuel: 250 000 m³ bio-ethanol

Bioro: 350 000 ton biodiesel

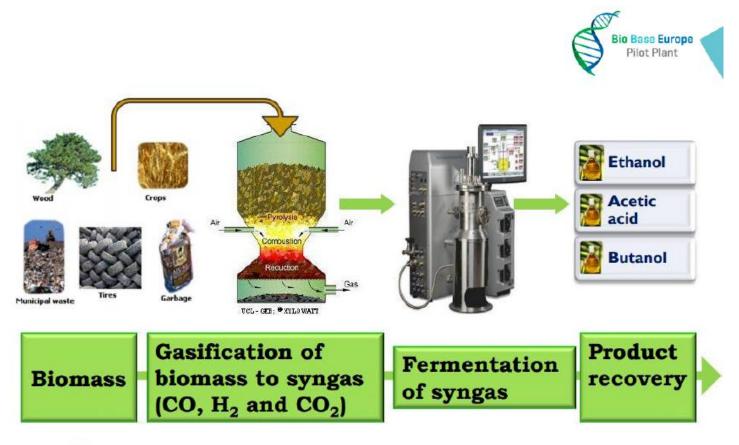
Electrabel: 240 MW bio-electricity

Eurosilo: 650 000 tons storage capacity





1. Vision: Gasification of (bio-)waste





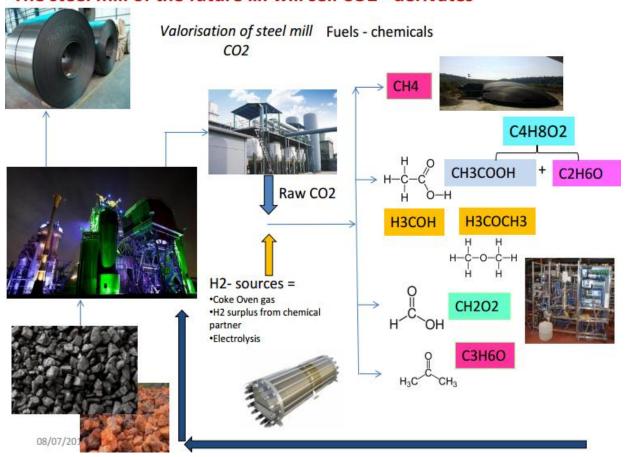




2. Vision: THE ZERO EMISSION PLANT



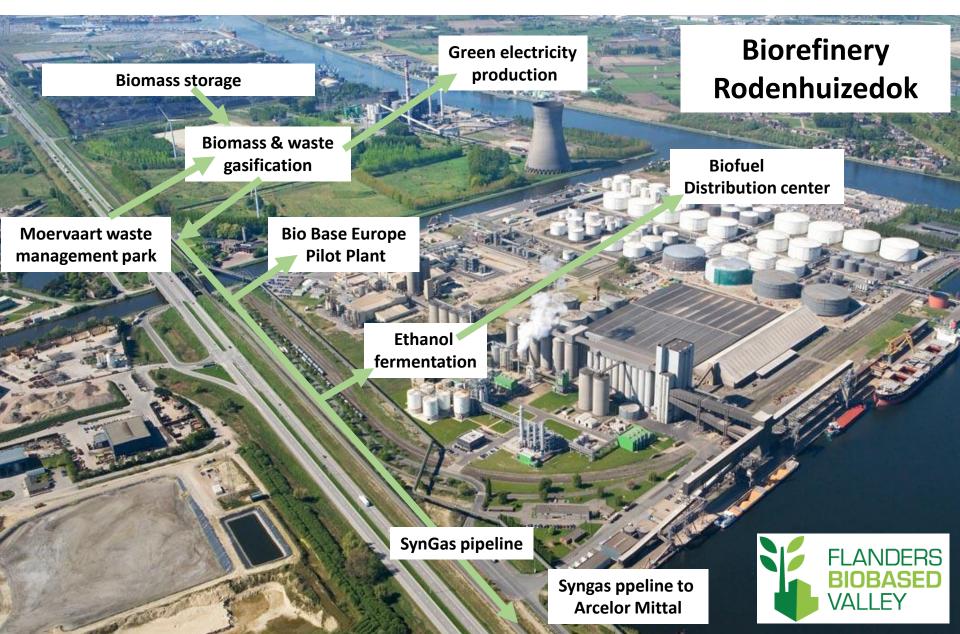
The steel mill of the future will sell CO2 - derivates







Expanding & integrating the cluster



Potential for investment?

The region wants to build on these developments:

- •new cluster of renewable chemicals
- syngas and (bio)-waste as feedstock

This means:

- Creating new synergies /symbiose between unrelated sectors
- A B2B trajectory
- Supporting new infrastructure (pipelines ...)/ shared risks
- Feasibility studies project: data difficult to obtain

Need for support to stimulate specific investment initiatives





Self assessment Tool?

Availibility of feedstock:

- is a + / with good infrastructure not decisive factor
- Some feedstocks only usable in" local" initiatives (logistics)

Infrastructure & financing:

- is paramount
- Support public funding accelerates private investments

Skilled workforce & support institutions

role in decision making of businesses?

(Regional) markets

Entrepeneurship

- limited importance in large scale transition projects (gaseous waste)
- Public support





Barriers?

Regulatory framework is not appropriate to bridge policy and new industry

• Not flexible or advanced for new developments

Company investment in high CAPEX industrial projects within new markets

Investments into framework **infrastructure**: especially in case of symbiose and new value chains: shared risk

No incentives nor leverage for transition towards sustainable chemicals





Thank you for your attention

Contacts:

- > Linda Verdonck: linda.verdonck@pomov.be
- > Sofie Dobbelaere: <u>sofie.dobbelaere@ugent.be</u>
- > Brecht Vanlerberghe: <u>brecht.vanlerberghe@bbeu.org</u>

