



DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



POWER4BIO
REGIONS FOR
BIOECONOMY

ECRN
European Chemical Regions Network



European Workshop Inclusion of Primary Production in Biobased value chains

How to connect farmers and biobased industry ?

Date: Thursday 20/02/2020

Place : Royal Flemish Academy of Science and the Arts, Rue Ducale 1, 1000 Brussels

Inclusion of Primary Production in Biobased value chains

Building new bioeconomy value chains by setting up new agro-industrial cooperation is a challenge for many regions in Europe that want to unlock their bioeconomy potential. The involvement of local farmers is a cornerstone for a sustainable bioeconomy, where technological innovations are able to attract new industrial investment and provide new agricultural income within ecological boundaries.

In fact, both food and biobased product innovations require structural change in the value chains. This means that farmers and industry have to find new collaboration forms, new contracts or networks to put innovations into practice. These changes require careful testing, and can be facilitated by public intermediaries and by multiple policy instruments from a wide spectrum of policy spheres.

This workshop is organised by the region of Flanders in Belgium and the European Chemical Regions Network (ECRN), under the scope of *POWER4BIO* project. It gathers representatives from different networks ranging from agriculture and rural development, to the chemical and biobased industry and the EU institutions. The overall objective of the workshop is to engage all relevant actors from farmers to industries, researchers, public authorities, and EU institutions :

- to present concrete case-studies and new developments of agro-industrial value chains that rely on innovative biobased solutions.
- to discuss the role of public policy and promote successful policy instruments aiming to make new biobased value chains possible in practice.
- to address common technical, economic and regulatory barriers for the creation of new agro-industrial partnerships.

Registration

Registration is possible until 5/02/2020 on :

<https://www.ewi-vlaanderen.be/evenementen/inclusion-primary-production-biobased-value-chains>



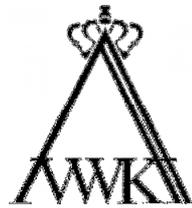


DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



POWER4BIO
REGIONS FOR
BIOECONOMY

E₂CRN
European Chemical Regions Network



Thursday 20/02/2020 9h00 to 18h00 :

**Inclusion of primary production in biobased value chains:
Case studies and policy options**

9h00 Registration

9h30 Introduction

9h40 Welcome

Representative from the Flemish Government, Department of Economy, Science and Innovation

Representative for Vice-Minister-President of the Government of Flanders, and Flemish Minister for Economy, Innovation, Work, Social economy and Agriculture

10h00 Session 1 : Innovations to join agriculture and biobased solutions (Part1)

The Flemish research and innovation system hosts several creative actors that are actively investigating new technologies and make the circular bioeconomy a reality. This section will present the latest developments, collaboration initiatives and R&D structures supporting agriculture and a biobased development in Flanders.

10h00-10h25 Enzymatic conversion of renewable biomass into green high value products

Karolien Vanbroekhoven & Winnie Dejonghe

Flemish Institute for Technological Research VITO (Vlaamse Instelling voor Technologisch Onderzoek)



VITO is a leading international research and service centre. It provides knowledge and technological innovations that facilitate the transition to a more sustainable society. VITO does this in the field of energy, chemistry, materials, health technology and land use. The multidisciplinary business unit Separation and Conversion Technology (SCT) has organized its strategic research program around the theme 'Sustainable Chemistry'. In general, SCT is strongly active in bioprocess development, optimization and intensification.

10h25-10h50 Flanders' FOOD as innovation partner for the agrifood industry in Flanders and Europe.

Maarten Uyttebroek

Flanders' FOOD



Flanders' FOOD is the spearhead cluster for the Flemish agrifood industry. It is an industry driven innovation platform and the spin in the web between industry, research institutes, government and the citizen to strengthen the Flemish agrifood companies in Flanders and Europe. Flanders' FOOD develops R&D projects in the whole value chain from field to fork. Flanders' FOOD is also a member of the Biobased Industries consortium.



DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



POWER4BIO
REGIONS FOR
BIOECONOMY

ECRN
European Chemical Regions Network



10h50-11h15 Biomass production on marginal soils in Europe

Nele Witters

Hasselt University



CMK (UHasselt) is a research institute that consists of almost 200 scientists covering 6 research groups (Environmental Biology, Zoology, biodiversity and toxicology, Applied and analytical chemistry, Nuclear technology, Environmental law, Environmental economics). Its research addresses challenges of high societal urgency that require analyses that span across the boundaries of different scientific domains and disciplines, and necessitate fundamental as well as applied research: (1) Understanding influences of the environment on organisms; (2) Developing and assessing sustainable clean technologies to mitigate influences of the environment on organisms; (3) Monitoring, valuing and optimizing biodiversity and ecosystem services under different stress conditions, including climate change.

11h15 Coffee Break

11h40-12h05 Biobased solutions to transform sidestreams from food value chains [prelim.]

Bart Van Droogenbroeck

Research Institute for Agriculture, Fisheries and Food (ILVO)



Instituut voor Landbouw-
Visserij- en Voedingsonderzoek

The Food Pilot is an application and analysis centre founded by Flanders' FOOD and ILVO. The food processing industry can use the Food Pilot facilities to develop and test new products and processes. Processing can be simulated using our semi-industrial scale production lines; product quality can be analysed in the laboratory.

12h05-12h30 BBI JU: Enhancing the participation of the farming sector in bio-based value chains

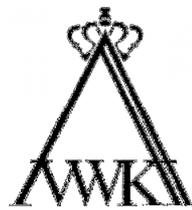
Ana Cuadrado Galván

Bio-Based Industries Joint Undertaking (BBI JU)



The Bio-based Industries Joint Undertaking (BBI JU) is a public-private partnership aiming at increasing investment in the development of a sustainable bio-based industry sector in Europe. This EU body aims at providing environmental and socio-economic benefits for European citizens, increasing the competitiveness of Europe and contributing to establishing Europe as a key player in research, demonstration and deployment of advanced bio-based products and biofuels. The BBI JU also plays an important role in achieving a bioeconomy in Europe

12h30 Networking Lunch



13h30 Case-studies: practical initiatives to include primary production in the bioeconomy

The case studies show successful structural approaches to create new collaborations between primary production and innovative biobased value chains

13h30-13h55 Co-creative design thinking leading to new ideas and collaborations in the agri-food chain



Jana Roels

Innovatiesteunpunt (Innovation Support Centre for Agricultural and Rural Development)

The Innovation Support Center for Agricultural and Rural Development inspires and informs farmers about new challenges and opportunities and supports them with the development and implementation of concrete projects. We coach farmers with the development of early innovation projects and grassroots ideas, provide answers to individual questions, give standard support on general themes, support farmers with the implementation of partnerships, use different types of learning modules and organise study events and training sessions.

The Innovation Support Center for Agricultural and Rural Development is embedded in Boerenbond & Landelijke Gilden, the conglomerate of the largest farmers organisation and the rural organisation in Flanders.

13h55-14h20 Miscanthus as biofuel

Christophe Florence

BioWanze



Biowanze is the largest bioethanol production site in Belgium with a production capacity of 300 million liters / year. Thanks to a principle of maximizing the value of the raw material, Biowanze also produces certified gluten, animal feed (Protiwanze) for cattle and pigs, fertilizers and green electricity. Biowanze has a permanent policy of “zero waste” on an industrial scale. Energy autonomy is ensured thanks to a biomass boiler and the valorization of the bran (external envelope of the wheat), biogas and co-products of distillation.

14h20-14h55 Verge management as a renewable feedstock provider for the production of biobased products

Nathalie Devriendt

ProNatura



Pro Natura is a non-profit organisation working in a sector of social economy. Pro Natura is a social and sustainable enterprise with 155 employees. The company has been taking care of nature conservation over the last 25 years, while creating new opportunities for jobs. Through innovative projects Pro Natura encourages green work in the regions and offers employment, training and work experience for people who have difficulties finding a job in the regular labour market.

14h55 Coffee Break



15h15 Policy approaches and instruments

Policies at regional, national and European level are working on dedicated instruments to stimulate the structural collaboration between primary production and industry. Biobased value chains are transversal and are affected by instruments from agricultural policy, innovation policy and industrial policy at the same time.

15h15-15h40 Mainstreaming the bioeconomy in rural areas

Laura Jalasjoki

ENRD Contact Point



The ENRD Contact Point supports the operation of the European Network for Rural Development (ENRD). It coordinates thematic and analytic work and facilitates networking and exchange between the stakeholders of the European rural development policy across the EU.

15h40-16h05 Innovative value management in the agri-business sector

Xavier Gellynck

Ghent University, Fac. Bioscience Engineering, Dep. Agricultural Economics



The research group Agro-food Marketing and Consumer Behaviour integrates expertise in the scientific disciplines of economics, sociology, agro-food marketing, consumer behaviour, market and marketing research, risk perception, communication, health promotion, and health education. This expertise has been demonstrated in recent high-quality studies on consumer behaviour towards functional foods, nutrition and health claims, nutrition labelling, sustainability and on the role of health-related information on food choice and dietary behaviour.

16h05-16h30 Policy instruments to facilitate agri-industry/chemistry cooperation [prelim.]

Harma Albering,

Economy and Innovation Department at Province Limburg, Netherlands

provincie
limburg



The Dutch province of Limburg is conveniently located in the center of Europe. It hosts several universities and the innovation Brightlands campuses. Here develop researchers, entrepreneurs, investors and students new solutions in the fields of materials, health, nutrition and smart services. Brightlands campuses count more than two hundred companies and institutions, with a total of twelve thousand employees and eight thousand students of different nationalities.

16h30 European panel discussion

Europeans have been instrumental in stimulating the development of the bioeconomy in urban and rural areas during the past decade. In November 2018, the European Commission published its updated Bioeconomy Strategy "A sustainable Bioeconomy for Europe: Strengthening the connection between economy, society and the environment". (Communication COM/2018/673)

The synergy between European and regional policies is of crucial importance in this evolution. The European panel discussion reflects on the potential role of regions in the development of rural bioeconomies, and the opportunities for collaboration with European policies.

- **Mr Galin Gentchev (DG Agri)**
- **Mr Dirk Carrez (Biobased Industry Consortium, BIC) (tbc)**
- **Mr Tomasz Calikowski (DG RTD)**
- **Ms. Maila Puolamaa (DG Grow)**

17h45 Conclusions of the day, and invitation for the network cocktail



Friday 21/02/2020: 8h15 – 15h00 :

Site visits: Biobased Innovations industrial development in Flanders¹

During the Friday site visit, the participants meet some of the Flemish innovation centres and industrial partners that are crucial actors in implementing industrial biotechnology solutions for new biobased products, for waste valorisation and CCU.

08h15-09h30 Departure of the bus at Royal Flemish Academy of Science and the Arts, Rue Ducale 1, 1000 Brussels

09h30-11h00 ArcelorMittal Ghent



ArcelorMittal Ghent belongs to the ArcelorMittal group, the world's leading steel and mining company. The Belgian sites produce innovative and sustainable steel products suitable for a wide range of applications.

ArcelorMittal Europe announced a CO2 roadmap to reduce emissions by 30% by 2030. This roadmap includes activities for (i) Clean power steelmaking, (ii) Circular carbon steelmaking, an (iii) Fossil fuel carbon capture and storage.

Biobased resources and processes play an important role in this roadmap. The Group will present their innovation plans and installations.

11h30-14h00 Bio Base Europe Pilot Plant



Bio Base Europe Pilot Plant is an independent, state-of-the-art facility that operates from a laboratory level to a multi-ton scale. Bio Base Europe Pilot Plant is a service provider for process development, scale-up and custom manufacturing of biobased products and processes. A wide and flexible spectrum of modular unit operations enables us to translate biobased lab protocol into a viable industrial process.

The Bio Base Europe Pilot Plant plays a crucial role within the Flemish and European innovation landscape. They will present their activities and give a guided tour in their facilities.

Practical issues

The program is still subject to change. The program and site visits are free of charge. Site visits are organised by bus and will depart from Brussels. Participants should provide their own hotel accommodation and transport to Brussels. The site visit is by bus. The bus leaves in Brussels, in front of the Royal Flemish Academy of Science and the Arts, Rue Ducale 1, 1000 Brussels.

The site visit ends in Ghent at 14h00. Two options are available :

- One bus will drive from Ghent directly to Brussels Airport, Zaventem. Estimated time of arrival at the airport is 15h30.
- One bus will drive from Ghent directly back to the Royal Flemish Academy of Science in the centre of Brussels. Estimated time of arrival is 15h30.

For more information : <https://power4bio.eu/> or contact : bioeconomie.ewi@vlaanderen.be

¹ The site visits are restricted to members of the networks associated to this event :

- European Rural Development Network
- Standing Committee on Agricultural Research working groups
- European Chemical Regions Network
- Power4Bio partners and associated organisations