





REPORT SmartPilots STUDY VISIT 3: Fraunhofer CBP October 13th, 2016 – Leuna, Germany

Short description of the shared pilot facility that was visited: brief history, how is the organization financed, business model, # of employees

Brief History

- Concept Phase: August 2007
- Cooperation of Uni Halle / TGZ / InfraLeuna / Fraunhofer- Gesellschaft (Project)
 Working Title: "CBC-Leuna" & Fraunhofer-Projektgroup "Demonstrationcenter for Chemistry and Industrial Biotechnology"

Content of Project:

Set up of a versatile, multiple purpose technology environment ("CBC-Leuna") at the interface of Chemistry and Industrial Biotechnology in order to transfer processes and technologies (C1-C6) from R&D to an industrial dimension in the framework of a new Fraunhofer-Projektgroup in Leuna, Germany

Key aspects

- Initially no limitation concerning raw material, processes and products
- Realization at a "neutral/non-committed" location (Leuna)
- Options for expansion and availability of industrial production at the Leuna chemical site

Implementation /Co-operation

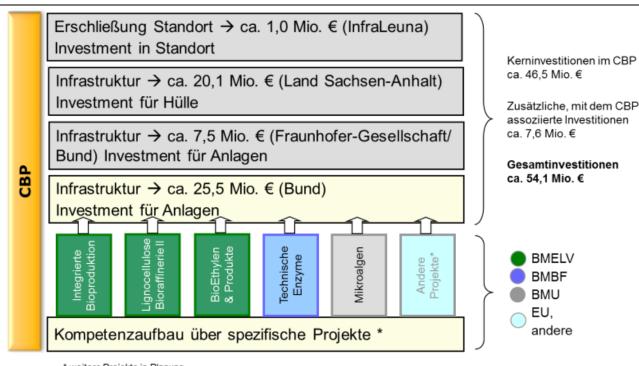
- Leuna Site/InfraLeuna
- Fraunhofer (Fraunhofer ICT und IGB)
- Uni Halle/TGZ Halle
- Federal state Sachsen-Anhalt
- Funding via BMBF, BMELV, EU

2007 - 2008

Negotiations with

- BMBF (Bundesministerium für Bildung und Forschung / Federal Ministry for Education and Research)
- BMELV (Bundesministerium für Ernährung und Landwirtschaft / Federal Ministry for Food and Agriculture)
- BMU (Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety)
- and the state Saxony-Anhalt
- → "Wittenberger-Declaration" April 2009





^{*} weitere Projekte in Planung

- 2009 first project proposal "integrated bioproduction" BMEL
- 2009 project proposal "Development of innovative processes for the production of enzymes (Innozym)" BMBF
- 2011 project proposal "Lignocellulosic-Biorefinery (Phase 2)" BMEL
- Official Inauguration in 2012

Completion of the different pilot plants and process units

- Utility Systems November 2012 (steam Juni 2013)
- Modul I technical enzymes –March 2013
- Modul II LC-Biorefinery May 2013
- Modul III Mikroalgea May 2014
- Modul IV Fermentation January 2013
- Modul V Separation techniques October 2014
- Modul VI Chemical processes November 2014

Meeting Agenda

8:30-9:00 Arrival and coffee
9:00-9:15 Welcome and introduction to the SmartPilots project: Ambition, Approach, Consortium
By Mr. Brecht Vanlerberghe, SmartPilots Project Coordinator

9:15-10:00 Partner presentations (7 partners, 2 case studies)

By all project partners

10:00 - 11:00 Fraunhofer CBP:

By Mr. Gerd Unkelback, Managing Director Fraunhofer CBP

- History
- Current Business Model
- Organisational structure
- Direct and indirect support mechanisms
- Network



	Generated impact
11:00 – 11:20	Coffee break
11:20 – 12:20	Guided visit of CBP
12:20 – 13:30	Lunch
13:30 – 14:00	Introduction to Leading edge Cluster Bioeconomy
	By Mrs. Sandra Seidewitz, Communicator Bioeconomy Cluster Management
14.00 - 14.30	Example of Support for Innovation
	By Dr. Ales Bulc, GlobalBioenergies, Project Manager Leuna Pilot Plant
14.30 – 15.00	Q&A
15.00	End of meeting

Highlights of the discussion

Key topics of discussion:

Policy strategies in Germany for Bioeconomy in general >Bioeconomy council, High tech strategy, Strategy for internationalization, Specific funding instruments are derived from these strategy papers How does a pilot facility add value to the strategic goals?

Pilot facilities are considered as Research Infrastructure in Germany

The pilot facility functions as

- R&D facility
- Demo plant for small and large companies
- Educational center for general public
- New role model for regional development integration of all stakeholders from the beginning
- Open access platform for new partners
- Training center for academic and industry staff
- Partner with a defined bio-economic profile for wider network (resource efficiency in Europe ie.)
- Regional installation for applied R&D with "global radiance" (Marketing aspect)

Working points:

- No funds available in Germany for piloting from research to market implementation (max. 200-400K for SMEs)
- 1,5 year from idea to granting of a project in national programs, this long and for many companies not workable
- Rather low investment of state funding in infrastructure. However ERDF calls for infrastructure are organized 'bottom up' and arranged by the Ministry directly.

Direct and indirect funding instruments see attached presentation from Mr Hennings.



Annex 1: Participants List

Name	First Name	Job Title	Affiliation	Project Partner	Case Study	Stake- holder
Bonetti	Ilaria	Project Manager	ISSI, IT	1		
Bulc	Ales	Managing Director	Global Bioenergies, DE			1
Creten	Tom	Beleidsmedewerker / Policy Officer	Dep. Economy, Science, Innovation, Flanders (EWI)	1		
Donati	Roberta	Project Manager for Environment Area	Metropolitan City, Prov. of Milano, IT			1
Edworthy	Linda	Director of Strategy and Investment	Tees Valley Comined Authority TVCA			1
Flippo	Peter	Business Development Manager	Bio Process Facility, NL	1		
Fritsch	Markus	Head of Process Development, Biotechnologies Div.	Thysen Krupp Indutsries Solutions			1
Groen	Marije		Province of South-Holland	1		
Härkönen	Mika	Managing Director	VTT, FI	1		
Huisman-Zilverentant	Carolien	Advisor Biobased Economy for SPF project / Program N	Biobased Delta, Zuid-Holland, NL			1
Krieg	Sabine	Business Development	Fraunhofer CBP, DE		1	
Le Hénaff	Yvon	CEO	ARD, FR		1	
Lincoln	Derek	Project Manager	Centre for Process Innovation (CPI), UK	1		
Lopinto	Paolo	Manager Assistant	ISSI, IT	1		
Molders	Katrien	Communication Manager	Bio Base Europe Pilot Plant (BBEPP), BE	1		
Oliviera	Agathe	Chargée de mission innovation, Direction de	Région Alsace Champagne-Ardenne Lorraine, FR			1
		l'Enseignement Supérieur, Recherche et Innovation				
Pearson	Steven	Head of Business & Strategy	Centre for Process Innovation (CPI), UK	1		
Sederel	Willem	Chairman and Board member	Biorenewables Business Platform / Biobased Delta, NL			1
Seidewitz	Sandra	Communicator	Bioeconomy Cluster, DE			1
Unkelbach	Gerd	CEO/Manager	Fraunhofer CBP, DE		1	
Vanlerberghe	Brecht	R&D Manager	Bio Base Europe Pilot Plant (BBEPP), BE	1		
Vindevogel	Sofia	HR and Administrative Manager	Bio Base Europe Pilot Plant (BBEPP), BE	1		
Zanetti	Laura	Resp. for energy production, energy saving and air qua	Metropolitan City, Prov. of Milano, IT			1
Total	24			11	3	10



Annex 2: Pictures of the study visit



