FOREST REFINE PARTNER – PROCESSUM

Forest Refine is a cross-border research project between Sweden and Finland about the raw material supply to biorefineries. Forest Refine has seven participating organizations, three from Sweden and four from Finland. This presentation of the participating organizations is about Processum in Sweden.

Processum brings a cluster of companies together in biorefinery matters. The company was started in 2003 as a technology park. It has developed into a leading biorefinery initiative on national as well as international level. In June 2013 they have 21 businesses along the coast of North Sweden as members of the company and they have 16 employees.

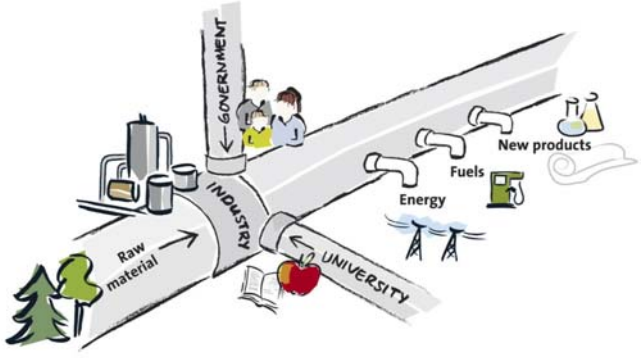
In May 2013 SP Technical Research Institute of Sweden acquired 60 percent of Processum Biorefinery Initiative AB. SP and Processums' member companies are now aiming to strengthen the role of Processum regionally, nationally and internationally as a leading center for bio-economy and the development of biorefineries. Most of the activities relate to Research and Industry in the areas of biotechnology, energy technology, inorganic chemistry, organic chemistry and raw materials with a focus on sustainability.

Processum is also host for the growth initiative "The Biorefinery of the Future":

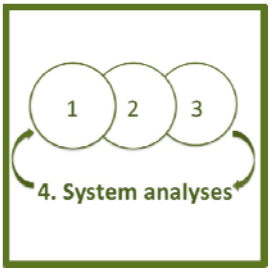
THE BIOREFINERY OF THE FUTURE

"We want to leave the fossil community, instead we want to create sustainable growth based on wood raw material and energy cops. The Biorefinery of the Future is the meeting place for leading industries and advanced research. Innovators meet large corporations, farmers work together with energy companies and agricultural science universities. Common projects are the key to the cooperation."

The aim is to develop products from renewable raw material in close cooperation with industry, academia and society.



PROCESSUM IN FOREST REFINE



Jonas Joelsson, Processum is engaged in Sub-project number:

3. Chemical and physical requirements of the forest biomass to biorefineries
4. System analyses and energy balances for biorefinery supply chains

Sub-project 3; Chemical and physical requirements of the forest biomass to biorefineries, fractionation of biomass, and preparation of bio-chemicals. Today it is not known what tree- and wood components will meet the demands of the whole biorefinery industry. Neither is it known how the logistical systems from the stump to the plant will affect the quality of the desired feed stocks.

Jonas Joelsson has been examining previous literature in this field and also to interview developer of processes at biorefineries to discuss requirements of today and how the requirements can change in the future. Together with Tero Tuuttila in Finland he has produced the work report; ”The history and current development of forest biorefineries in Finland and Sweden.”

Pilot equipments in Örnsköldsvik and Umeå

Processum’s contribution to Forest Refine is also the possibility to test the fractions in their pilot equipments. The plants can be used for a number of processes on a larger scale than what is feasible on laboratory scale. The industrial processability of the new biomass assortment can be compared against more conventional biomass assortments.

Sub-project 4; System analysis for biorefinery supply chains.

Jonas is also part of the group of partners in Forest Refine who in spring 2013 designed the analysis system to be used in the project. The system analysis will define and design some few specific case scenarios of supply chains of forest biomass to biorefinery industries in the BA region.

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European Union
European Regional Development Fund
Botnia-Atlantica
Cross-border cooperation over mountain and sea
REGION VÄSTERBOTTEN
Länsstyrelsen Västernorrland
Österbottens förbund Pohjanmaan liitto
REGIONAL COUNCIL OF CENTRAL OSTROBOTHNIA