Paper Province
A forest bioeconomy hotspot
SUSTAINABLE FORESTRY
FOREST VOLUME EVOLUTION IN VÄRMLAND

Total volume in millions m³
NET GROWTH IN PAPER PROVINCE

MILLION M\(^3\) TOTAL GROWTH

- MILLION M\(^3\) HARVEST

= MILLION M\(^3\) NET GROWTH
VÄRMLAND FACTS

- 16 municipalities
- 281,482 citizens 2018
- 75% covered by forest (12,000 km² of productive forest)
- The forestry and forest industry employs approx. 24% of the total workforce in the county, around 29,000 jobs.
- 6 million m³ wood harvested annually
- 1.6 million ton paper is produced
- 1.8 million ton pulp is produced
- 20,800 private forest owners, 8,200 are women
MILLS IN
PAPER PROVINCE

- pulp & paper mill
- saw mill
- bioenergy plant

Göteborg
BILLERUDKORSNÄS
Next generation board machine –
750 M€

Cross Laminated Timber facility –
45 M€

New laminate production line –
3 M€

REGIONAL INVESTMENTS IN
FOREST PRODUCTS

Wetmoulded food tray production

stora enso

Viscose production unit –
7 M€

re:newcell

Biobased barriers

Cellcomb

Lignin biofuel pilot –
13 M€

Rottneros

seelution

RenFuel
BILLERUDKORSNÄS

- Premium liner for corrugated board, liquid packaging and cartonboard
- 350m long and 8.6m wide; 1000 m/min
- 750 M€ 2017-2019

Annual capacity of 550,000 tonnes
STORA ENSO GRUVÖN CLT

- Production 100 000 m³/year
- Swedish production 2018: 22 000 m³/year
- Investment 45 M€
Den nya skolbyggnaden vid Sodra skolan kommer att byggas i CLT (korslammat trä). Byggnaden är lokalt producerad. Den byggs också transplaneras från Stora Ensos nya CLT-fabrik vid Gruvons sågverk till Sodra skolan - knappt en 1 km.
HOW HAVE THE INVESTMENTS AFFECTED OTHER COMPANIES IN THE MUNICIPALITY?

- Poll 200 companies
- 79 answers
  - 52% not affected
  - 39% positive, revenue & employees
  - 15 companies higher revenue 2M€
- Stora Enso Gruvön + 60 employees
TRITON VALSTEKNIK

- SME
- Started 1999, today 56 employees
- Investment 3 M€ last 5 year
- Aim to double revenue every third year
- Hired Environmental Manager and actively working with Gender
A forest bioeconomy cluster in mid Sweden

- Started as a project in 1999
- 104 member companies
- ~ 7,000 employees in the member companies
- 24% of work force
- Member companies turnover 25 billion EUR 2015
- Vinnväxt winner in 2013 (Long term financing)
- 13 employees
- ESCA Gold Label Dec 2017
WE SHALL BE THE LEADING COMPETENCE NODE FOR FOREST BASED BIOECONOMY
STRATEGY DOCUMENT

01

Farmland’s Research and Innovation Strategy for Specialisation 2015-2020

Region Värmland
Academy for Smart Specialisation 2016
A NEW STRATEGY FOCUSING ON BIO•ECONOMY
WHAT DO WE DO IN THE REGION?
STRATEGIC FOCUS AREAS

- Innovation & development
- Future competence
- Regional mobilisation
- Internationalisation
Industrial symbiosis (IS) is vitally important in facilitating the move towards a circular economy by helping industries and businesses cooperate in the exchange of natural resources and production infrastructures.
Industrial Symbiosis

INDUSTRIAL SYMBIOSIS STARTS IN THE FOREST
INDUSTRIAL SYMBIOSIS
FOCUS ON SIDE- & WASTESTREAMS
BACKGROUND

Energy meeting for cluster members
INDUSTRIAL SYMBIOSIS
FOCUS ON SIDE- & WASTESTREAMS
BACKGROUND

2011-15
2013-15
2014

Circular Economy in Scandinavia
Creating Value from Side and Waste Streams
Matchmaking and site visits from Oslo to Karlstad
|
November 24-26, 2015
INDUSTRIAL SYMBIOSIS
FOCUS ON SIDE- & WASTE STREAMS
CONTINUE
Regional cooperation within industrial symbiosis
Nordic Network for IUS
BALTIC INDUSTRIAL SYMBIOSIS

Promoting industrial symbiosis, a concept for sustainable regional development, across the Baltic Sea region

DURATION: Sep 2018 – Jun 2021

TOTAL BUDGET: EUR 2.1 million

EUROPEAN REGIONAL DEVELOPMENT FUND: EUR 1.3 million

NORWEGIAN FUNDING: EUR 0.2 million

LEAD PARTNER: Symbiosis Center Denmark, Kalundborg Municipality (DK)

PROJECT PARTNERS: Kalundborg Symbiosis (DK), Næstved Municipality (DK), The Paper Province economic association (SE), Digipolis (FI), Trøndelag County Council (NO), Swedish Agency for Economy and Regional Growth (SE), Gdansk University of Technology (PL), Linköping University (SE) and Roskilde University (DK)
WORKPACKAGES

• WP1 Project Management and Administration
• WP2 Accelerating Symbiotic Business Development
  • 2.1 Identification of new symbiotic business opportunities
  • 2.2 Symbiotic business matchmaking
  • 2.3 Peer-to-Peer learning on accelerating symbiotic business development
  • 2.4 Living Lab to demonstrate the use of a ressource stream
WORKPACKAGES

• WP3 Building Capacity to work with Industrial Symbiosis Developments
  • Investigation of the existing design and institutional capacity for Industrial Symbiosis
  • Executive Training Programs for Industrial Symbiosis Practitioners

• WP4 Policies for Industrial Symbiosis Development
  • Mapping local, regional and national policies for Industrial Symbiosis development
  • BSR Industrial Symbiosis Council
  • Encouraging Industrial Symbiosis development in Estonia, Latvia, Lithuania and Poland
INDUSTRIAL & URBAN SYMBIOSIS
AIR WATER MATERIAL ENERGY LOGISTICS COMPETENCE
PAPER PROVINCE
DEMONSTRATE BIOECONOMY

Contact
Magnus Persson
+46 70 3427941
m.persson@paperprovince.com