

Processum,

The biorefinery innovation hub

SHREC 22 September

Jonas Joelsson

Manager innovation system

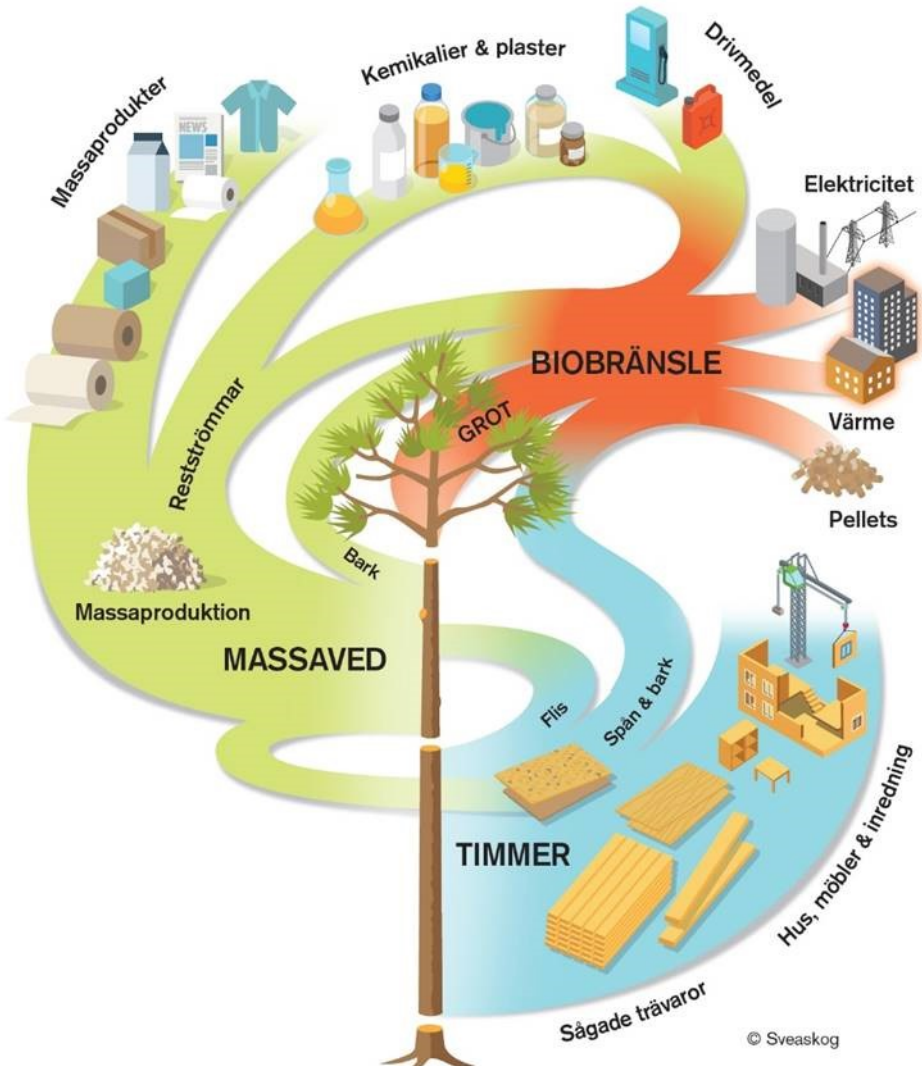
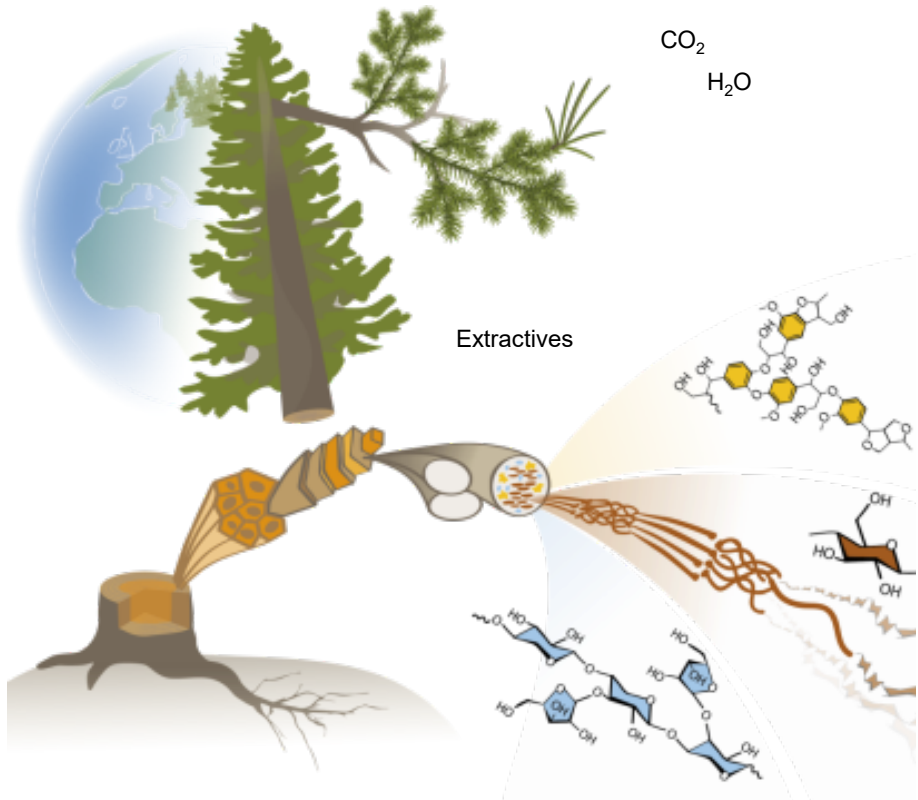
jonas.joelsson@processum.se



**The creative hub in a world leading cluster
for development and commercialisation
of biorefinery processes and products**

**Biorefinery: maximizing the value of the biobased feedstock
Forest feedstock – yes, and more**

Forest industry today



Fish



Fashion

EcoligentPaper®

CLEAN tech HANGERS

PATENTED METHOD TO MASS PRODUCE 3D-MOULDED CELLULOSE PRODUCTS,
AS ADEQUATE ALTERNATIV TO OIL AND PLASTICS.



Carbon
Fibers



Function



food



clothing



mobility



presentation



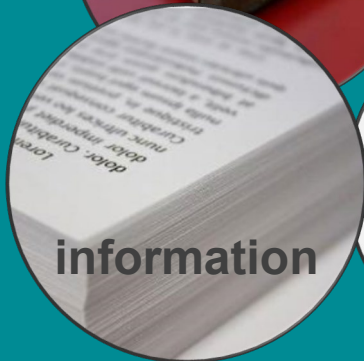
shelter



packaging



textiles



information



chemicals



construction



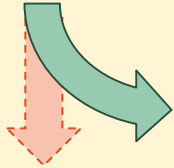
Personal care



hygiene

Closing the loop, Processing the bottom of the barrel, Circular solutions...

Ash
Organic sludge
Inorganic sludge
Woody residues
...



Higher value

Cost or low value



RISE

The Swedish research institute and innovation partner

- 2,800 employees (2019).
- Turnover approx. M€ 350.
- Runs 100s of test and demonstration facilities, open for industry, SMEs, universities and institutes (RISE is owner and partner in 60 % of all Sweden's T&D facilities).



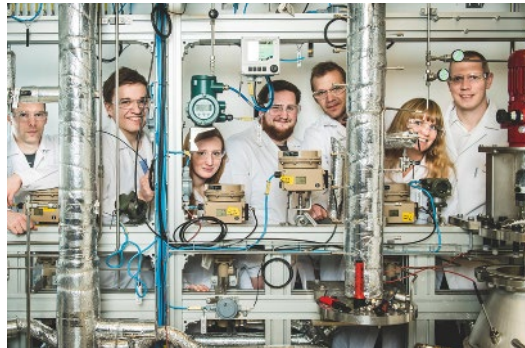
RISE Processum

- Owned by RISE (60%) and regional industry (40%)
- Applied biorefinery R&D, scale-up, commercialisation
- Approx. 40 employees in Örnsköldsvik and Sundsvall

- **Biotechnology**



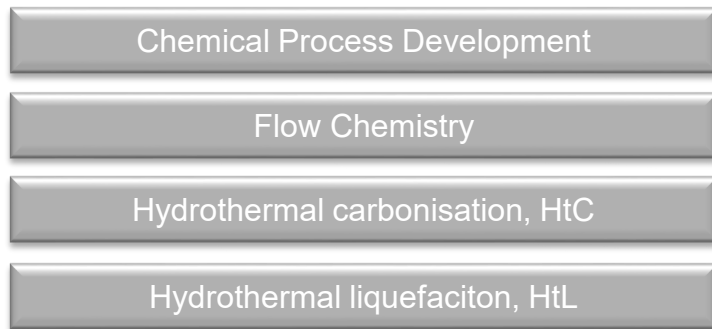
- **Chemistry**



- **Innovation System**



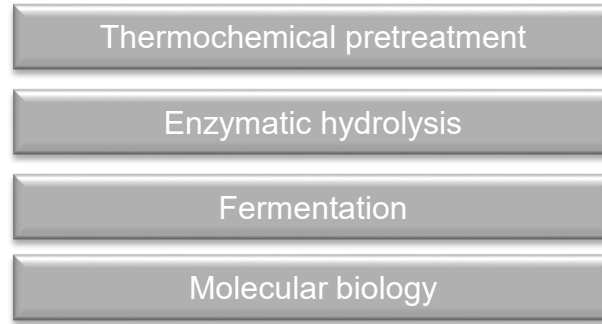
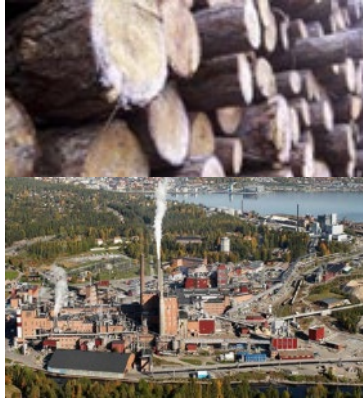
Research Area, Chemistry



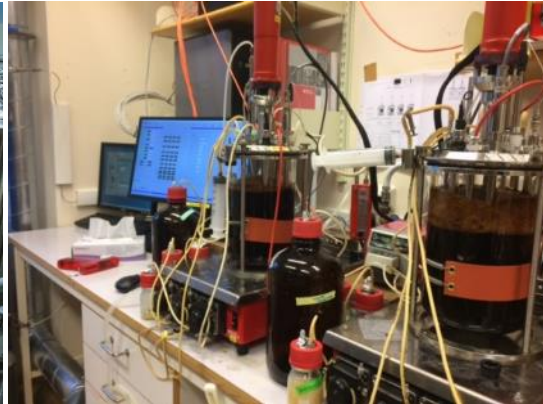
Oils
Fuels
Alcohols
Green Chemicals
Lactic acid (PLA)
Crystalline
NanoCellulose
Materials



Research Area, Biotechnology



Single Cell Protein
Ethanol
Fatty acids
Lactic acid (PLA)
Green Chemicals
Bacterial
nanocellulose



BIOREFINERY AREA IN ÖRNSKÖLDSVIK

Companies

Products

Research and development



An aerial photograph of a large industrial complex, likely a pulp mill, situated along a river and a lake. The facility features numerous buildings, storage piles, and infrastructure. A white arrow points from the text area to a specific building within the complex.

**RI
SE**

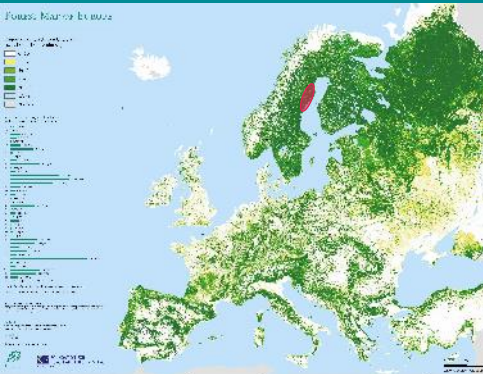
Research Institutes
of Sweden

Bioeconomy division
- Management
- RISE Processum AB
- MoRe Research AB
and more...

From lab to 10's of m³ on one site!



processum
PART OF RI.SE



The biorefinery
innovation platform



Experts in biorefining & waste
valorisation

Dedicated to innovation, scale-up,
impact

In need of partners on our mission



Thank You!

Jonas Joelsson

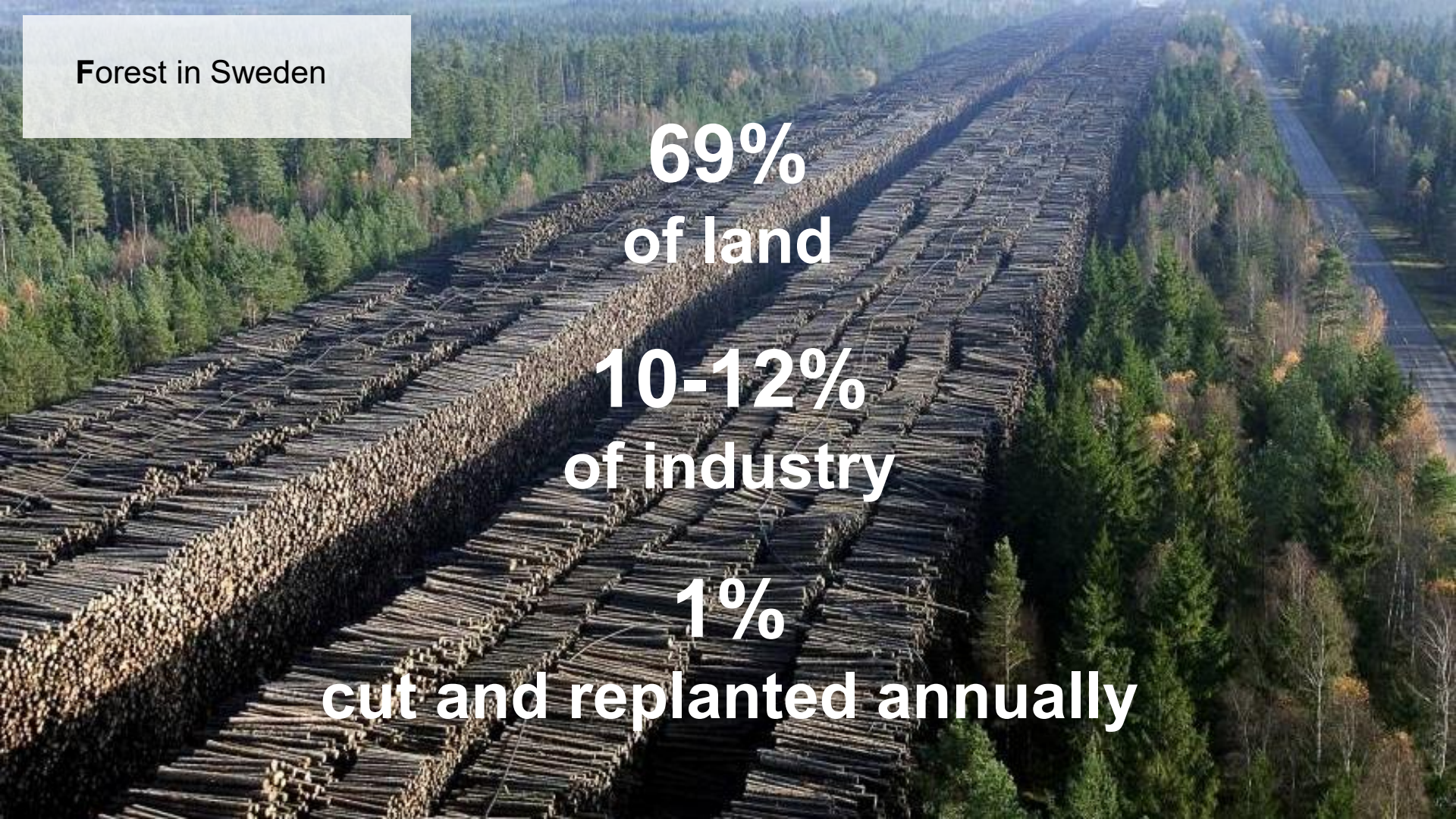
Jonas.joelsson@processum.se
+ 46 10 516 67 60

IB:ACCEL – Innovation Platform Biorefinery: Accelerate to commercialization



**ÖRNSKÖLD SVIKS
KOMMUN**





Forest in Sweden

69%
of land

10-12%
of industry

1%
cut and replanted annually



ARCTIC CIRCLE

NORDLAND

o r e g i a n
e a

ARCTIC CIRCLE

EUROPE

Halten Bank

NORD-TRONDELAG

Trondheim

SØR-TRONDELAG

S W E

VÄSTERNORRLAND

FINLAND

NI

Pielinen

Sumainen

ITA-SUOMEN LÄÄNI

LÄNSI-SUOMEN LÄÄNI

MORE OG RØMSDAL



RISE — Mallpresentation



Content may not reflect National Geographic's current map policy. Sources: National Geogr...

