

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

May 2019

Highlights

- ❖ Stora Enso continues to develop further applications of its biocomposite DuraSense
- ❖ Huhtamaki's new paper based solutions for food
- ❖ Start-Ups SunCarbon and Spinnova partnering with oil companies
- ❖ VTT and RISE, and EFI and CIFOR joining forces

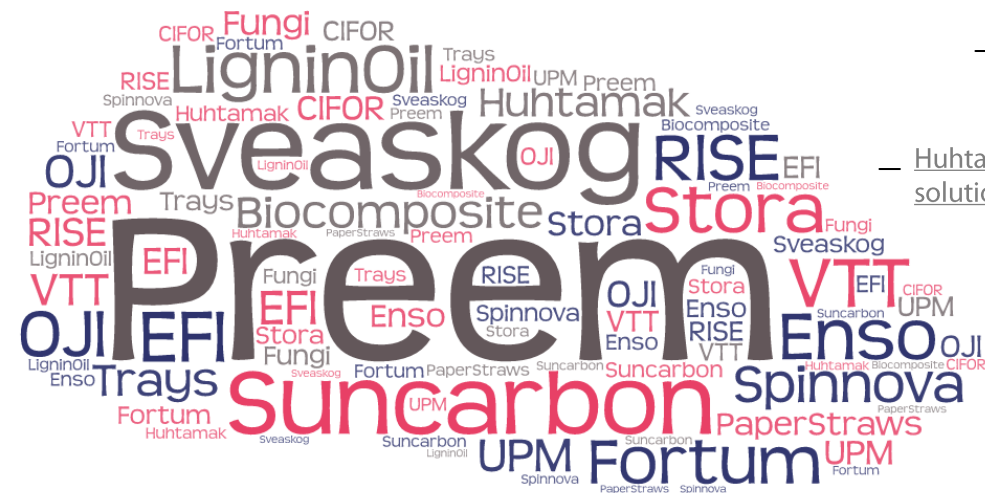
Contents

- [Stora Enso](#)
 - Biocomposite for cosmetics, food and luxury packaging
 - Recycling of paper cups for magazine paper production
- [Huhtamaki's paper based solutions for food](#)
- [Preem and Sveaskog invest in SunCarbon for a lignin oil plant](#)
- [Fortum partnership with Spinnova](#)
- [VTT and RISE: collaboration in bio- and circular economy](#)
- [Oji Holdings: SILBIO BARRIER for food contact](#)
- [UPM transplantation of threatened species](#)
- [EFI and CIFOR join forces](#)

Services Provided by RAIZ Technological Scouting:

- Technological Scouting Newsletter (monthly)
- Technological Scouting On Demand (specific technological issues, upon request)
- Industrial Property (IP) Survey (quarterly)

For further information please contact: mariana.oliveira@thenavigatorcompany.com



BIOREFINERY

photo: Stora Enso

Stora Enso

Biocomposite for cosmetics, food and luxury packaging

Stora Enso thermoplastic fiber based biocomposite DuraSense™ was previously presented as being suitable for a wide range of applications, such as furniture, pallets, hand tools, automotive parts, kitchen utensils and accessories and packaging for beauty and lifestyle products. After designing a range of kitchen utensils with a Nordic producer of household products (TS Newsletter August 2018), Stora Enso is now introducing DuraSense™ to new customer segments concerning premium cosmetics, food and luxury brands. Caps and bottle stoppers have already been developed using the biocomposite DuraSense™.

Read more ➤ [Stora Enso](#)



photo: Stora Enso

Recycling of paper cups for magazine paper production

In recycling trials at the Langerbrugge Mill, half a million of baled post-consumer paper cups collected from fast food restaurants and coffee houses were re-pulped and recycled into magazine paper. The result confirmed that paper cups can be recycled at the mill without any additional process equipment, and that the fibres are well suited for other paper applications, such as magazine paper production.

Stora Enso now aims to start recycling used paper cups on a large scale and is looking into partnerships for the collection and sorting of used paper cups.

Read more ➤ [Stora Enso](#)

BIOREFINERY



photo: Huhtamaki

Huhtamaki's paper based solutions for food

Huhtamaki has opened a new, state-of-the-art foodservice packaging manufacturing facility in Northern Ireland, dedicated to the production of Huhtamaki's developed solution for paper straws. Not much details are made available concerning the paper straws, only that they are strong, functional and superior in performance comparing to other market offers. It is also known that Huhtamaki has invested in new manufacturing setups for paper straws, anticipated to be used at the new production facility.

Additionally, Huhtamaki presents the Huhtamaki Fresh, a fiber-based safe alternative to black plastic trays, for both oven and microwave applications. The trays development started in 2016, within an EU's Bio Based Industries Joint Undertaking program for research and innovation. The trays are manufactured by Huhtamaki, using molded fiber technology, and the fiber used as the base material comes from the Swedish forest company Södra. Fresh trays are expected to reach the UK market this May.

Read more > [PaperStraws](#) | [Fresh](#) | [EU Project](#)

● Technological
● Product Development



Preem and Sveaskog invest in SunCarbon for a lignin oil plant

Swedish oil refiner Preem AB and Sveaskog AB, the state-owned forestry company, have become shareholders in SunCarbon AB. SunCarbon AB is a Swedish technology provider which developed a technology for producing lignin oil from pulp mill's black liquor.

A lignin oil plant for biofuels is expected, and would be operational in early 2022 and produce about 45 000 tonnes of lignin oil per annum.

Read more > [BioEnergyInternational](#)

● Technological
● Product Development

BIOREFINERY



photo: Fortum

Fortum partnership with Spinnova

After investing in the Start-Up Infinited Fiber Company, Fortum is now partnering with the Start-Up Spinnova, for using its technology for converting agricultural waste streams into textile quality fibre. Spinnova's technology turns microfibrillated cellulose directly into textile fibre without any dissolving or harmful chemical processes. The process is closed and the resulting recyclable fibre is a more sustainable alternative to cotton and fossil-based raw materials used in various textile fibres and fabrics.

Fortum is the state-owned Finnish energy company.

Read more > [Fortum](#)

● Technological
● Product Development



photo: VTT

VTT and RISE: collaboration in bio- and circular economy

A new agreement between VTT and RISE was signed to establish a framework for collaboration in the field of bio - and circular economy test and demo infrastructures. The cooperation will focus especially on biomaterials, biofuel manufacturing processes and digitalization of a biobased and circular economy.

Read more > [VTT](#)

● Technological

BIOREFINERY



photo: OJI

Oji Holdings: **SILBIO BARRIER** for food contact

The Oji Group presents the environmentally friendly SILBIO BARRIER, a paper material, for food contact applications, with a barrier coating to prevent oxygen and vapor from intruding from outside, thereby helping to prevent the deterioration of contents. It is also able to retain content fragrance and moisture. In addition, the developed product has re-defibration properties (ability to return to pulp again), so that it can be reused as used paper.

Read more ➤ [OJI](#)

● Technological
● Product Development

FOREST



photo: UPM

UPM transplantation of threatened species

UPM is carrying out a project for the transplantation of rare and threatened wood-inhabiting fungi. The aim is to accelerate the reintroduction of species inhabiting deadwood to forests by planting these fungi to deadwood concentrations in the company forests. The project is a further step into UPM's target to improve the biodiversity of the company forests in Finland, as increasing deadwood is known to be a key method for achieving this target.

Read more ➤ [UPM](#)

● Forest

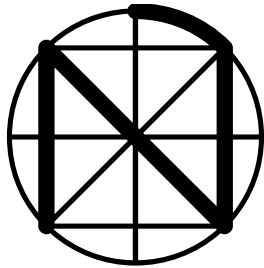


photo: EFI

EFI and CIFOR join forces

The European Forest Institute (EFI) and the Center for International Forestry Research (CIFOR) are joining forces on researching the role of sustainable forest management for achieving the U.N. Sustainable Development Goals and to better connect science to policy actions. The role of forest conservation and sustainable forest management in achieving the Sustainable Development Goals, the role of climate smart forestry and of bioeconomy in mitigating and adapting to climate change and in reaching the Paris Agreement targets and global forest governance, including but not limited to Forest Law Enforcement and REDD+ (conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks) questions, are major research areas to be addressed.

Read more ➤ [EFI](#)



RAIZ – Forest and Paper Research Institute

Quinta de S. Francisco, Apartado 15, 3801-501 Eixo

Tel: +351 234 920 130, Fax: +351 234 931 359

mariana.oliveira@thenavigatorcompany.com

PART OF
**THE NAVIGATOR
COMPANY**