

RAIZ



Forest and Paper Research Institute

TECHNOLOGICAL
SCOUTING NEWSLETTER

November 2019

Highlights

- New packaging innovation solutions by Stora Enso, Smurfit Kappa and UPM
- A new alliance to promote fiber-based packaging in circular economy by Capi



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Services Provided by RAIZ Technological Scouting:

Technological Scouting Newsletter (monthly)

Technological Scouting On Demand (specific technological issues, upon request)

Industrial Property (IP) Survey (quarterly)

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START-UP OF THE MONTH



Venvirotech is a Cataluña based startup that produces bioplastics, biodegradable in the environment and compatible with human body. The company has developed its own mixed culture bacteria for producing bioplastics. The PHA-bacteria use PHA as an energy reserve so VEnvirotech's technology incite them to produce it constantly. Venvirotech then extract and transform the bacteria's bioplastic into PHA sustainable resins for different market applications. The bacteria is feed with organic wastes such as food, wine, animal or sewage sludge waste.

Read more ➤ [Venvirotech](#)



PACKAGING



Stora Enso: new formed fiber offering

Stora Enso has announced a new collaboration with a producer of plant-based barrier coatings, the HS Manufacturing Group (HSMG), for applying HSM's PROTĒAN™ barrier technology to Stora's renewable and recyclable PureFiber™ product offering. The PureFiber™ is a range of single-use products that are renewable, recyclable, biodegradable and plastic free. This new collaboration comes on the following of the announcement, early this year, by Stora Enso, of a EUR 5 million investment to build a new production line and related infrastructure to manufacture formed fiber products at Hylte Mill in Sweden.

Read more > [Stora Enso](#)

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photo: Papnews

Smurfit Kappa: innovative food packaging

Through its Better Planet Packaging initiative, Smurfit Kappa has collaborated with Mitsubishi HiTec Paper for developing an innovative and recyclable food-safe packaging. The outer board-based packaging is made from Smurfit Kappa's Catcher Board MB12, which has an adsorbing technology which protects against aromas and possible migration of substances. The inner packaging contains the Mitsubishi HiTec Paper's BARRICOTE barrier paper, which offers protection against moisture and grease, and has heat-sealing properties.

Read more > [Papnews](#)

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PACKAGING



photo: UPM

UPM: plastic-free office paper wrap

UniqueBarr™, a biodegradable and plastic-free wrapping paper, protects the packaged product without the need for plastic lamination. Without the plastic coating, the paper wrap can be recycled with regular paper waste and recycled up to seven times into new paper products.

It additionally enables a more efficient material flow, with fewer converting steps, and removes the need for transportation between different facilities.

Read more > [UPM](#)

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BIOREFINERY



Klabin: pilot microfibrillated pulp and lignin plants in final testing phase

Klabin announced that its Pilot Plants Complex for industrial-scale production of microfibrillated pulp and lignin are already at its final testing phase. Klabin additionally refers that the microfibrillated pulp plant is already at the pre-operational test phase and expected to be ready to operate normally in the coming weeks. The lignin plant has already successfully passed the first production test. This Pilot Plants Complex, at the Monte Alegre Unit in Telémaco Borba, Paraná, is part of Klabin's investments in research and development, having received investments of R\$32 million in 2018.

Read more > [woodbizforum](#)

RAIZ and NVG within the inpactus project is looking to produce microfibrillated cellulose and nanocrystalline cellulose from E. globulus bleached pulp for new high-value added applications.

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BIOREFINERY

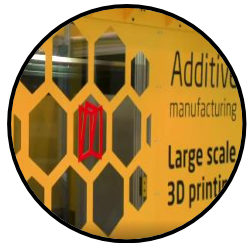


photo: Stora Enso
LinkedIn

Stora Enso: 3D printed windows

Stora Enso continues to broaden its DuraSense® biocomposite applications. Stora Enso is providing DuraSense® to NorDan, a Scandinavian window and door manufacturer, for the production of 3D printed windows. NorDan has already commissioned a custom 3D printer for meeting the expected large-scale manufacturing needs.

Read more > [Stora Enso LinkedIn](#)

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photo: Södra

Södra: Once more

Södra claims to have reached a unique solution that will enable circular flows in the fashion and textile industry, at a time where no one in the world could recycle fibres from blended fabrics on a large scale. Södra's new technique can separate the cotton and polyester in polycotton blends, being the pure cotton fibres then added to Södra wood-derived textile pulp, which can then be used to make new textiles. Södra's pulp mill at Mörrum already produced pulp by adding 20 tonnes of used textiles. Production will commence at a low rate of 30 tonnes this year, but the long-term target is to add 25,000 tonnes of textiles to Södra's pulp production.

Read more > [Cision | Södra: Once more](#)

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BIOREFINERY



4evergreen: an alliance to promote fiber-based packaging in circular economy

Cepi, the European association representing the paper industry, announced the new alliance 4evergreen with the aim of boosting the contribution of fibre-based packaging in a circular and sustainable economy that minimizes climate and environmental impact. 4evergreen intends to engage industry members from across the fibre-based packaging value chain, from paper and board producers to packaging converters, brand-owners and retailers, technology and material suppliers, waste sorters and collectors. The alliance members include, among others, Nestlé, Danone, Mars, Stora Enso, Smurfit Kappa, Sappi, Metsä Board, UPM,, Mondi, Kotkamills, Ahlstrom Munksjö, International Paper, BillerudKorsnäs, Huhtamäki, SIG Combibloc, Tetra Pak, Elopak, AR Packaging, and Sonoco.

Read more > [Cepi](#)

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FOREST

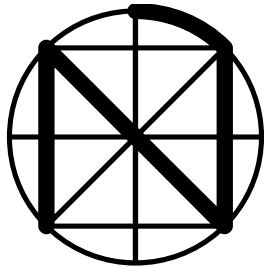


Södra: \$5.2 million for automated forest tree breeding

Södra announced the investment in a large-scale automated seedling multiplication facility which results from a collaboration with innovative technologies with company SweTree Technologies. \$5.2 million will be invested in the pilot facility in Umeå, Sweden. Stora Enso, Sveaskog and Holmen are as well co-funding the project which is looking for a technological leap for fast and efficient seedling production from the best tree breeding material in Sweden. SweTree Technologies has been working on a technology for automated seedling production based on somatic embryogenesis, making possible to develop the qualitative characteristics of trees to improve their resilience to diseases and pests. The facility is scheduled for completion within one year.

Read more > [lesprom](#)

● Forest



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