



# Packaging Innovation

November | 2020



FutureBridge

## WHAT'S INSIDE!

The month of November saw multiple developments in the **biodegradable and flexible packaging innovation** trend:

- **The biodegradable packaging** segment is highly active with both food & beverage and packaging manufacturers investing in development of value-added packaging technologies
- Biodegradable packaging consumes less energy during manufacture, has low production cost, biodegrades in a specific medium (water, soil etc.) under certain conditions

01



**The rising demand for biodegradable packaging, companies are increasingly investing and collaborating to introduce new packaging products**

SPOTLIGHT

02



stordenso

**The latest innovations focus on developing biodegradable inner lining to reduce the plastics application**

SPOTLIGHT

03



**PopPack & PPI Tech launch sustainable flexible packs**

04



**AstraPouch introduces flexible packaging for carbonated beverages**

## The rising demand for biodegradable packaging, companies are increasingly investing and collaborating to introduce new packaging products

### #PlasticReduction

- Entities are increasingly focused on developing **alternative** solutions, which can reduce the global plastic crisis
- **Removing plastics** from portfolios is now a top priority for companies as it reflects commitments towards **environmental safety** while gaining customer loyalty at the same time
- To mitigate the problem of plastic pollution in oceans, start-up companies such as **Torphene** and **Oceanium** are developing **marine-safe** biodegradable packaging material
- Due to the growth in demand for bio-based packaging, **TIPA** has received **USD 4 million investment** to develop biodegradable packaging material to replace **environmentally** damaging plastic packaging

**Torphene** creates biodegradable material containing graphene

- Torphene has developed a biopolymer that composites naturally without any human intervention, even in the ocean



Scottish start-up, **Oceanium**, develops seaweed-based, marine-safe bio-packaging

- Oceanium has developed marine-safe, home compostable bio-packaging materials and food products made from sustainably-farmed seaweed

**Brrr Box** disrupts Styrofoam coolers with DS Smith's biodegradable Greencoat cardboard box

- US-based Brrr Box has developed a recyclable, biodegradable convenience cooler under the same name using DS Smith



**KFC** introduces biodegradable cutlery

- The new 'spork' is made from bamboo, corn, and sugarcane. It is compostable at room temperature, and it breaks down into biomass, carbon dioxide, and water

**BGN Technologies** announces research collaboration with **ECOIBERIA** for the biodegradation of plastic

- The research will focus on bacterial biodegradation of Polyethylene terephthalate (PET) for the purpose of plastic recycling



Coffee maker **Meira** cuts carbon footprint with bio-based packaging

- Meira, part of the Massimo Zanetti Beverage Group, has launched Vallilan Paahtimo offers a sustainable cup. In partnership with packaging manufacturer Amcor, the line includes bio-based packaging with a 45% reduced carbon footprint

**Coca-Cola** partners with Danish start-up **Paboco** to develop a bio-based bottle

- The two companies have produced a first-generation prototype featuring a paper shell and a 100% recycled plastic closure and liner inside. The next step is creating a paper bottle without a plastic liner



**Millennium Food-Tech** invests USD 4m in **TIPA**

- With this investment, TIPA has developed biodegradable, flexible food packaging to replace environmentally damaging plastic packaging

#### LEGEND

— Product Launch — Collaboration — Investment

## The latest innovations focus on developing biodegradable inner lining to reduce the plastics application

### #Patents #Biodegradable

- The products with an inner lining of **PLA or cellulose** will see a rise in demand as industries seek **sustainable and biodegradable** materials for packaging
- The **PLA** based lining provides economically viable alternative to PET-based lining used in packaging
- Research and innovation activities in biodegradable packaging solutions space are majorly witnessed in **Europe, especially in France and Germany**

#### Insider Pick – Method to produce biodegradable PLA based packaging solution with improved barrier and adhesive properties

**Title:** Heat sealable biodegradable packaging material, its manufacturing method and a product package made therefrom

**Publication Number:** [EP2683623](#)

#### Abstract:

The invention relates to a heat-sealable biodegradable packaging material, which comprises a fiber substrate 1 as well as one or more polymeric coating layers extruded thereon. According to the invention, the material includes a polymeric coating layer 2, which contains not less than 90 weight-% of polylactide and, as an additive, not more than 10 weight-% of acrylic copolymer blended therein for improving the adhesion and/or heat sealing ability of the layer. The invention encompasses also a method for manufacturing packaging material, as well as a product package obtained from the material.

#### Key Takeaway:

The patent provides biodegradable PLA-based packaging inner lining & production methods to improve its adhesive & barrier properties to act as an effective alternative to traditional inner linings

#### Inventors

Kimmo Nevalainen



#### Earliest Publication Date

04 Nov 2020

#### Insider Pick – Method to produce packaging product using pulp with biodegradable and sustainable cellulose-based inner lining

**Title:** Biodegradable and compostable food packaging unit from a molded pulp material with a cellulose-base laminate layer, and method for manufacturing such food packaging unit

**Publication Number:** [WO2019190324A1](#)

#### Abstract:

The present invention relates to a biodegradable food packaging unit (2) from a moulded pulp material and a method for manufacturing such biodegradable packaging unit. The packaging according to the invention comprises a food receiving or carrying compartment having a food contact surface, wherein the moulded pulp material comprises an amount of a biodegradable aliphatic polyester; wherein the food contact surface comprises a cellulose-based laminate layer (10); and wherein the food packaging unit is a compostable food packaging unit. In a preferred embodiment the amount of biodegradable aliphatic polyester is in the range of 0.5-20 wt. %, more preferably in the range of 1-15 wt. %.

#### Key Takeaway:

The patent highlights the production method for packaging material made from pulp with an inner lining of biodegradable aliphatic polyester fibers, produced from cellulose fibers, which has barrier properties

#### Inventors

Harald John KuiperJan Hendrik Timmerman

#### Earliest Publication Date

03 Oct 2019



#Product Launch  
#SustainablePackaging  
#RecycledPackaging

- Players such as **AstraPouch** has launched **PopPack** that has improved quality packaging and helps to increase the **shelf-life of the food products**
- **AstraPouch** has launched a **recyclable packaging material** in the flexible packaging space. Companies are increasingly **looking into options to increase sustainability** of the entire packaging material

08 Nov 2020, Sunday

## PopPack & PPI Tech launched sustainable, flexible packs

### Product: EasyPop



#### Advantages:

- Easy to fill & seal
- Easy to open with one hand
- Appropriate for snacks, foods, condiments and beverages

#### Other Advantages:

- Convenient packaging with greater production efficiency
- Easy to recycle with smart packaging solutions that reduce plastic waste

- PPI Technologies Group has launched a cooperation agreement with PopPack, offering 'Air-Powered Package' design technologies to easily open flexible packages
- PopPack's EasyPop design technologies apply to solids, liquids, and powders for food products including multi-use bottle, pouches, sachets, trays, and stick-packs

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25 Nov 2020, Wednesday

## AstraPouch introduces flexible packaging for carbonated beverages

### Product: Beer To-Go Pouch

#### Advantages

- **Saves space:** One case of flat pouches is the equivalent of one pallet of glass growlers
- **Easy grip:** Fills faster than glass growlers
- **Stays fresher:** One-way tap keeps oxygen out
- **Reduces waste:** Extra large head space accommodates foam, because foam is beer
- **Environmentally friendly:** Recycled and reused, and reduces carbon footprint by 85% (compared to glass)



- The Beer To-Go Pouch is cost and space saving option and offers product protection benefits
- The new pouch is convenient, durable, and environment-friendly of all AstraPouch's products
- The new range of packaging is ideal for beer, soda, wine, spirits, slushies', cold brew coffee, and other carbonated beverages

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**North America**

55 Madison Ave, Suite 400  
Morristown, NJ 07960  
USA  
T: +1 212 835 1590

**Europe**

Stadsplateau 7  
3521 AZ Utrecht  
The Netherlands  
T: +31 30 298 2108

**United Kingdom**

5 Chancery Lane  
London EC4A 1BL  
United Kingdom  
T: +44 207 406 7548

**Asia Pacific**

Millennium Business Park  
Sector 3, Building # 4, Mahape  
Navi Mumbai 400 710  
India  
T: +91 22 6772 5700