

## Coca-Cola's PlantBottle in Ford Fusion

Source: Green Chemical Blog

Posted: November 15, 2013



Coca-Cola's presentation at the Ecochem conference in Switzerland and maybe get an update on the sales of their PlantBottle™ as well as updates on JBF's bio-MEG project in Brazil. For those who are not familiar with PlantBottle™, it is a bio-based PET (polyethylene terephthalate) resin currently made with sugarcane-based monoethylene glycol (around 30% by weight) and the rest with petroleum-based purified terephthalic acid (PTA).

Today, Coca-Cola announced that its PlantBottle™ technology is being applied for the first time beyond PET packaging, and is now being used as part of the interior fabric of a Ford Fusion

Energi plug-in hybrid research vehicle. Scientists and engineers at the two companies co-developed the first-ever fiber that can be woven into durable, automotive-grade PET fabric using the PlantBottle™ material. The bio-based PET fabric is used for seat cushions, seat backs, head restraints, door panel inserts and headliners. The Ford Fusion Energi research vehicle will be on display later this month at the Los Angeles Auto Show. Ford is evaluating the potential of using the material in other applications.



According to Coca-Cola, more than 18bn PlantBottle™ packages have been distributed in 28 countries since 2009. The company plans to convert all of its PET plastic bottles – which accounts for approximately 60% of its packaging globally – to PlantBottle packaging by 2020.

Using plant-based materials to create fabrics helps to reduce the amount of petroleum needed in the production of traditional automotive interior materials. Ford said if the plant-based interior materials were used in a majority of vehicles in the United States, it would save the equivalent of 295,000 gallons of gasoline and 6,000 barrels of oil.



The addition of plant-based fabrics in the Fusion Energi is the latest step by Ford to embrace eco-friendly materials in the plug-in hybrid. Current Fusion Energi vehicles utilize enough denim in the carpet to produce two pairs of blue jeans and available cloth seat options utilize recycled plastic from 38.9 plastic bottles, Ford said.

## FKuR Opens New Biopolymer Compounding Line

Source: European Plastics News

Posted: November 14, 2013



Germany-based maker of biodegradable and biobased polymer compounds, FKUR Kunststoff, has opened an additional line for the production of biopolymers. It is the third compounding line the company has bought from KraussMaffei Berstorff.

"Thanks to the fact that biopolymers are biodegradable and/or made of renewable primary products, they have firmly established themselves in the market over the last few years", said Lars Darnedde who is responsible for process engineering in the field of biopolymer compounding and processing at KraussMaffei Berstorff.

"The global production of biopolymers increased from 249 kt in 2009 to about 1,160 kt in 2011 and experts expect the figure to quintuple to about 5,780 kt by 2016", added Darnedde. The most common bioplastics are bio PE and PET as well as starch and PLA blends.

## Biome Bioplastics serves up compostable coffee pods

Source: Biome Bioplastics

Posted: November 7, 2013



Biome Bioplastics has helped to develop a biodegradable coffee pod, offering one of the first sustainable packaging alternatives in the single-serve market. The global coffee capsule market is worth \$6.6bn and is considered to be a rare bright spot in the global food and drink industry. There are now around 50 different coffee pod or capsule systems on the market, but their convenience comes at a price.

An estimated 9.1 billion single-serve coffee and drink cartridges wind up in US landfills every year, amounting to some 19 million cubic feet of waste. Coffee-pod machines are also increasingly popular in Britain with usage up by 45.1% between February 2012 and 2013, equating to around 186m capsules.

Unfortunately, single serve coffee pods are not easily recyclable. Mixed material pods are sent to landfill and those brands that do offer a recycling service have few recycling points and limited collection service. With mounting pressure around the environmental impact of their success, the coffee industry urgently needs more sustainable packaging options.

In response to this challenge, Biome Bioplastics has developed a portfolio of compostable materials for coffee pods based on renewable, natural resources including plant starches and tree by-products. These bioplastics will degrade to prescribed international standards in composting environments.

Biome Bioplastics CEO Paul Mines explains: Single-serve coffee pods are an excellent example of the fundamental role that packaging plays in delivering quality and convenience in the food service sector. The challenge is to reduce environmental impact through packaging optimisation without impacting on food quality or safety, or inconveniencing the customer. Bioplastics are an important part of the solution.



Based on the success of the biodegradable pods, Biome Bioplastics is working with manufacturing and brand partners to develop a number of natural polymer-based solutions for the hot drinks industry, with further announcements expected in the coming months.



## U.S. Legislative Climate Creating Opportunities for Bioplastics Industry

Source: Cereplast, Inc

Posted: November 5, 2013

Cereplast, Inc. (CERP), a leading manufacturer of proprietary biobased, compostable and sustainable bioplastics, today is providing an update on the legislative climate in the United States and the potential opportunities it is creating for the bioplastics industry. Regional and federal laws could create \$180 million in annual bioplastics industry revenue, of which Cereplast expect to pick up several million in 2014 and beyond to supply resin used for the manufacture of food serveware and compostable trash bags.

The Federal Trade Commission (FTC) recently announced several enforcement actions against plastics companies for not complying with the FTC Green Guides. This marks the first time the agency is addressing biodegradable plastic claims. The enforcement actions relate specifically to companies making unsupported and allegedly false claims that additives make their conventional plastics biodegradable. Countries around the world are taking a stand against these types of additives since, unlike compostable bioplastics, they cannot be verified by any standard specification. On the other hand, internationally established and acknowledged standards exist to substantiate claims regarding the biodegradability/compostability of bioplastics. The absence of these types of additives in the marketplace would be a win for the bioplastics industry.

Additionally, cities across the United States are taking steps toward developing composting infrastructures, with San Francisco and Portland as pioneers in this movement. More recently, in New York City, Mayor Michael R. Bloomberg is taking steps to implement a composting program in an effort to reduce waste in the city. With the expanse of composting infrastructures around the country, the demand for bioplastics is growing. Certified compostable bioplastics will biodegrade within 180 days or less, making them the perfect solution for single-use disposable food service ware. Carry-out containers, utensils, cups and straws made from compostable bioplastics can be disposed of with food waste in industrial composting facilities, significantly reducing the amount of food waste and plastic waste that winds up in landfills. Cereplast Compostables resins are biodegradable by industrial composting in the United States and in Europe meeting the ASTM D6400 or EN 13432 standards for compostability. Many grades have BPI and/or DIN Certco certification.



Chairman and CEO of Cereplast Mr. Frederic Scheer commented, "We are extremely pleased to see the FTC taking a stance against false marketing claims that harm the bioplastics industry. We are also pleased to see cities such as New York moving toward composting their waste. This is a tremendous opportunity for the Company, and we are aggressively targeting sales developments in the region."

## European Bioplastics Sees Opportunity in EU Thin Plastic Bags Move

Source: ICIS News

Posted: November 4, 2013

The European Commission's proposal to reduce consumption of thin plastic bags presents an important opportunity to promote bioplastic alternatives, the European Bioplastics trade association said on Monday. "Today's proposal of the European Commission aiming to reduce the consumption of plastic carrier bags in the EU is an important first step in the direction of a more sustainable economy," said Francois de Bie, chairman of European Bioplastics. He added: "Under this directive, the Italian plastic bag law would be finally validated. This law banned fossil-based lightweight plastic carrier bags, and allows only single-use bags that are compostable according to EN 13432 to be utilised."

European Bioplastics supports the exemption of bio-based, non-biodegradable shopping bags, that contain at least 50% bio-based content, from restrictive market regulations. European Environment Commissioner Janez Potocnik is encouraging the 28 EU member states to tax or even ban lightweight single-use plastic bags handed out in shops in a bid to address the tonnes of plastic waste that can survive for centuries after having accumulated in the environment. "Plastic bags are a symbol of our throwaway society; they are made of a material that lasts for hundred of years, yet we only use them for a few minutes," Potocnik said at a press conference in Brussels.

Every year, almost 100bn plastic bags are used in the EU, with approximately 90% of these lightweight bags that are far less likely to be reused than thicker bags, the commissioner said. "In fact, more than eight billion plastic bags end up as litter in Europe every year causing enormous environmental damage particularly to fish and birds that end up swallowing particles of plastic," he added. Some member states have already achieved great results in cutting use of plastic bags and if others followed the European Union could reduce its consumption of plastic bags by as much as 80%, Potocnik said. All of Potocnik's proposals must be approved by the European Parliament and EU member states to take effect.

