

## EcoCortec bio film to target marine pollution

Source: European Plastics News

Posted: Sep 02, 2014

Croatian specialist packaging producer EcoCortec has developed marine biodegradable film products designed to combat the scourge of plastics packaging waste polluting the world's oceans.

Its 'EcoOcean' flexible packaging, produced from material made with the latest biobased PHA polymer technology, is fully marine biodegradable. The film and bags, containing 77% biobased content, are targeted at markets such as cruise lines, hotels and resorts in coastal parts of Europe, as well as environmentally sensitive areas around rivers and lakes, according to the US-owned converter.

EcoCortec, based in Beli Manastir, Croatia, participated as a flexible packaging production partner in the European 'Marine Clean' project 'Marine debris removal preventing further litter entry', sponsored by the CIP Eco-Innovation Programme.

The project is aimed at preventing the hazardous impact of conventional plastic materials at sea besides promoting sustainability and innovative technology. A significant aspect of the scheme is to influence policy change within the EU to minimise pollution and to develop a new technological platform for the next generation of environmentally friendly products and practices to be implemented in EU countries.

EcoOcean will biodegrade by anaerobic digestion in marine, natural soil and water environments and in domestic and municipal composting systems. It is heat and moisture resistant making it suitable for compostable bags, according to EcoCortec.

The firm, an offshoot of Cortec Corp. of St Paul, Minnesota in the US, is constructing a new 1,600 square metre production hall at the Croatian facility to house three more hi-tech extrusion lines and a VpCI papers confectioning line as part of a €3m site expansion scheme.



## Bioplastics break into local market

Source: Phuket Gazette

Posted: Sep 03, 2014

Dairy Home, a leading dairy producer, has agreed to use bioplastics for all of its yoghurt packaging, in a deal struck with NatureWorks Asia Pacific, an affiliate of PTT Global Chemical, marking significant progress in PTTGC's aspiration to turn Thailand into a hub of the bioplastics industry in Asia.

Dairy Home Managing Director Pruittti Kerdchoochuen said he expected other leading dairy companies to follow his firm's lead in using bioplastic packaging soon. This is because the price gap between bioplastics and conventional polymers has been reduced to about 30 per cent, from some 300 per cent a few years ago.

Athavudhi Hirunburana, chief operating officer of PTTGC, said the launch of bioplastic packaging for Dairy Home's organic products was part of his firm's strategy to become a chemical-business leader that pays attention to economic, social and environmental impacts.

Thanks to its acquisition in 2001 of a 50-per-cent share in NatureWorks, the world's leading bioplastics manufacturer that owns proprietary production technologies, PTTGC has become ready to introduce bioplastics to Asian markets, as well as preparing to expand the manufacturing base to the region, especially Thailand.

"Utilizing agricultural produce for bioplastics manufacturing will help add value to the country's farm products, boosting farmers' incomes, while we serve the needs of modern consumers who care and want to take part in environmental protection" he said.

Dairy Home is one of only two dairy-product companies to receive official organic certificates in Thailand. The company will introduce bioplastic-packaged yoghurt late this month. It currently sells about 2.5 million yoghurt cups per year.

Pruittti said Dairy Home, which until recently sold its organic products only at higher-end supermarkets, had made more headway into the mass market, reflecting higher acceptance by mass consumers of pricier organic foods. Dairy Home's bioplastic-packaged organic yoghurt products are available at leading stores such as Jiffy, MaxValue, Villa Market, Foodland, Isetan, Big C, and Tesco Lotus.

Viboon Pungprasert, general manager of NatureWorks Asia Pacific, said the firm's bioplastic products marketed under the Ingeo brand were made 100 per cent from plants grown in nature. While maintaining the same good quality as oil-based plastics, Ingeo's "green chemicals" help reduce greenhouse gases and energy consumption by more than 50 per cent. Ingeo polylactic acid bio-polymers have been used by leading dairy firms such as Danone and Stonefield in Germany and the United States.



## BioPlastics reaches new heights

Source: The Times

Posted: Sep 03, 2014

A small little business in Blooming Prairie has turned itself around since 2000. After President and CEO Gary J. Noble purchased BioPlastic Solutions LLC (at the time it was DiaService), the company saw 150 to 200 percent growth in the first few years. Then over a seven year span, the manufacturer averaged 45 percent growth per year.

Noble is one of 11 owners of the company. The manufacturing company produces custom extrusions and bio development parts. BioPlastic Solutions develops and sells its own product. It ships products outside of the country, but most of the work is confined to the United States. The company is considering selling products in Europe.

The manufacturer hasn't always been successful. In 2007, the company took a hit when the building and trade industry collapsed along with other parts of the United States economy. "We lost 67 percent of our business in one year. The company has had to rebuild twice."

BioPlastic Solutions has rebuilt with the help of the Blooming Prairie community. "The EDA has been great," Noble said. "We started with a loan tied to the development. We have another equipment loan running now." What also helped was the business being in the community at the start. Like other businesses of this magnitude, BioPlastic Solutions had problems finding high-skilled jobs. These included technician-level people capable of designing, tooling and getting the tool to operate right.

"It is a problem all over because the industry is very small," Noble said. When Noble took over the business in 2000 the company was called DiaService. Noble said the name change to BioPlastic Solutions occurred because it was hard for those in the business to understand what the company did. "So because of our biomaterial development and the biotechnology that we were working on, it seemed to be a better fit," he said. "Plus we were an S Corp and moved to an LLC because some of the partners preferred that at the time."

The company primarily does custom extrusions and works in the building and trade industry. "We do custom jobs for companies," Noble said. "For example, we do the door sweeps with Menards. This consists of all the door sweeps at the bottom of their master craft entry doors."

In general, Noble said BioPlastic Solutions extends its activities with companies by helping solve problems and developing a new product to solve those problems. The bio plastics portion of the company started two years after Noble took over in 2000. "A couple of guys stopped by and asked if we had considered using bio materials," he recalls. "Well, at the same time a couple of our customers asked us about replacing petroleum-based materials with bio materials."

For the past 12 years, BioPlastic Solutions has been working with groups to bring that type of material up to a different level. "We just wanted to manufacture to company's specifics and requirements and have them take it to the marketplace." Noble is betting the manufacturing company's long-term success on the bio industry.

To date, there is one bio contract signed. Another is coming and Noble said that discussions have started for a third. "All are in the building and trade industry. All are in different categories," he said.



## Coca-Cola expands investment in bio-paraxylene development

Source: Bioplastics Magazine

Posted: Sep 09, 2014

*USA-based biochemical and biofuels company Virent announced yesterday that The Coca-Cola Company is making an additional investment in the company's development and commercialization of its bio-based paraxylene, BioFormPX.*



This investment will enable Virent to scale up separation and purification of BioFormPX material at their demonstration plant in Madison, WI.

"Over the course of our work together, Virent has continuously delivered on their commitments and advanced their technology. That progress supports building additional capability for Virent and advances us on the path to a full-scale commercial solution for our 100% plant-based PET plastic packaging" said Scott Vitters, General Manager, PlantBottle Innovation Platform at The Coca-Cola Company.

Virent and The Coca-Cola Company have been working together since 2011, when they first announced their Joint Development Agreement and a Master Supply Agreement focused on the development of bio-based PX technology. Paraxylene (Px), a chemical that is currently produced in a crude oil refinery, is the main raw material used to produce terephthalic acid (PTA), one of the two components of which PET - the packaging material used by Coca-Cola - is made up of.

"The Coca-Cola Company continues to be a valued partner for Virent. Their intention to use our BioFormPX material in the next generation of PlantBottle packaging is critical in attracting manufacturing partners from

the PET supply chain. This - along with the progress we've made in our joint development work - moves us closer to seeing the first commercial 100% bio-based PET bottles on retail shelves made using Virent technology" said Lee Edwards, Virent CEO.

In the course of their work with The Coca-Cola Company, Virent has progressed their PX technology to commercial readiness, improved the process economics and produced bio-based PX which has been converted by The Coca-Cola Company into 100% bio-based PET bottles. This new investment will allow production of larger quantities of BioFormPX material.

Virent has run its demonstration system to fulfill a number of fuel and chemical orders since it started operation in 2010. This added capability to produce larger quantities of purified PX will be combined with additional system enhancements to increase production capabilities, including larger volumes of bio-fuel and other bio-materials.(KL)



## Chemical industry embraces engagement with sustainability

Source: Bioplastics Magazine

Posted: Sep 10, 2014

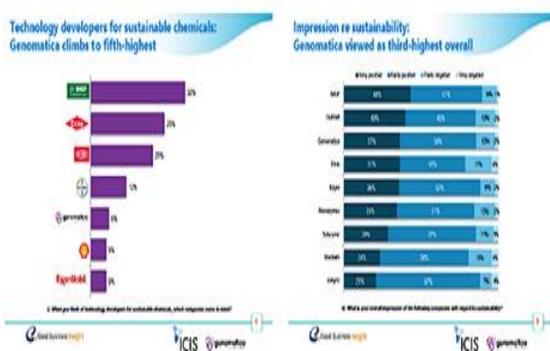
Genomatica has announced the publication of the results of a major survey of sustainability issues in the mainstream chemical industry. The survey was conducted together with ICIS, one of the world's leading chemical and energy market information providers.

The companies believe the new survey, the third in a series they have run since 2009, is the most extensive survey to date of the chemical industry on the topic of sustainability. The survey drew 958 responses worldwide, with 53% of respondents at the level of vice president, general manager or above. According to the survey:

- 69% of respondents say their company has a sustainability policy in place or are currently developing one.
- 67% describe their company's top business priority in sustainability as either promoting or marketing sustainable products, taking an active lead on sustainability issues, or engaging customers on a business level.
- 81% of producers say it's very or moderately important to be a front runner in sustainable chemicals.

On the specific topic of renewable feedstocks, 35% of producers report investing in R&D in renewable feedstocks and 31% have a strategic commitment to their use. On economics, 43% of producers say there is long-term economic advantage to renewable feedstocks; and 51% say they should reduce exposure to the petroleum market.

And interest in and plans to offer sustainable chemicals and products suggest that product value chains are moving in synch toward greater sustainability:



- 72% of producers now offer more sustainable versions of chemicals or plan to offer them within two years. That allows chemical users to do better planning for sustainability.
- Producers say that 80% of their customers are showing the same or higher interest in sustainable chemicals than just one year ago, with a sizable segment showing much greater interest. This signifies strong growth in customer demand and helps drive faster action by producers.
- 75% of chemical users either offer products made with more sustainable chemicals or expect to do so within two years. They're taking action to make products that they plan to differentiate based on sustainability, to meet growing demand.

When survey respondents mention what companies come to mind as 'technology developers for sustainable chemicals,' they unsurprisingly list some of the industry's leading firms, including BASF, Dow, DuPont and Bayer, in that order. Genomatica comes in fifth, ahead of many much larger firms. This rank is up from ninth in 2012.

Survey respondents also rated their overall impressions of numerous companies with regards to sustainability. The three companies viewed with the highest very positive rating were BASF, DuPont and Genomatica.

"This survey provides concrete, current data to confirm the transition toward greater sustainability in the mainstream chemical industry," said Christophe Schilling, CEO of Genomatica. "We're proud to support the industry by showing how and where biotechnology can be harnessed to develop new, better processes for the advantaged production of major chemicals using alternative feedstocks. And we're delighted to see that our message and results are being noticed, as shown by how respondents include us with the leaders when thinking about technology for more sustainable chemicals." (KL)