

# Closing the loop for paper-coated packaging and serviceware: now compostable AND recyclable with Luminy® from Total Corbion PLA

**Total Corbion PLA has demonstrated that paper-coated applications with Luminy® PLA can now not only be certified compostable, but also recyclable. The new development adds an additional, previously unattainable end-of-life option for applications based on coated paperboard/paper such as coffee cups and take-out containers, ensuring valuable resources can be reused as new products.**

Paperboard applications coated with traditional, oil-based plastics had the drawback that the plastic needed to be separated from the paper before recycling can take place, otherwise the polymer can interfere with the recyclability of the paper. For this reason, many applications were not recycled but instead incinerated or landfilled as there was no other end-of-life option available.

Total Corbion PLA has demonstrated that paperboard coated with Luminy® PLA does not interfere with the pulpability or recyclability of the paper. Coating a paperboard application with Luminy® PLA therefore, not only enables the widely used industrial composting end-of-life option (EN13432), but now also supports mechanical/material recyclability within existing recycling streams. Mechanical recycling is featured higher up on the end-of-life waste hierarchy, as the valuable resources in the product are retained for further use. The recyclability of the PLA-coated paperboard was certified by Western Michigan University and the paperboard samples for the trial were provided by Metpack, who are specialized in extruded barrier coated food grade paper boards.

Luminy® PLA can be applied on conventional paperboard extrusion lines at competitive speeds. Using a PLA-coating allows for a fully biobased solution with excellent seal strength and printability that does not require pretreatment. As PLA is a polar material like paper, outstanding adhesion can be achieved. Applying a PLA-coating results in good flavor and aroma barrier and excellent grease and mineral oil resistance. Furthermore, Total Corbion PLA has demonstrated that Luminy® PLA-coated paperboard can now also be used for ready-to-eat containers that need to be reheated in the microwave or oven, thereby expanding the application window even further.

Jenifer Mitja, Application Specialist at Total Corbion PLA, led the project: *“At Total Corbion PLA, we are passionate about developing applications together with our customers to reach new levels of production efficiency, product performance and sustainability milestones. By proving the recyclability of PLA coated paperboard, we’ve gained an additional and even more valuable end-of-life option which the whole value chain can benefit from”.*

Aykut Güleriyüz, Production Manager at Metpack, is pleased that they can now offer even greater solutions to their customers: *“Proving the recyclability of PLA in coated paperboard applications is a fantastic way to keep valuable resources in use for future product lifecycles, and we are very pleased to present this solution to our customers”.*

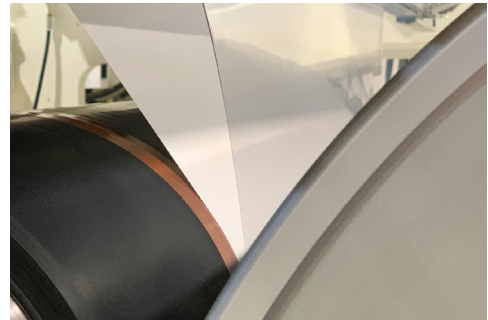


Photo 1: The paperboard samples for the trial were produced and provided by Metpack, pictured above (photo courtesy of Metpack).

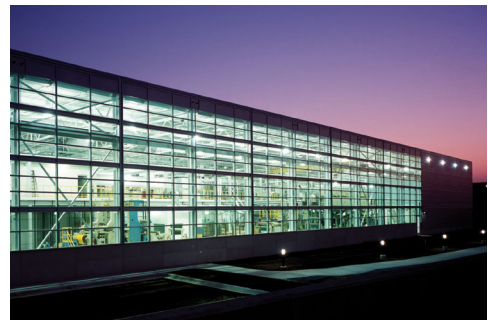


Photo 2: The recyclability of the Luminy® PLA-coated paperboard was certified by Western Michigan University, pictured above (photo courtesy of WMU).

Thomas Philipon, CEO at Total Corbion PLA recognizes the achievement: *“Packaging in general is under quite some pressure from both consumers and governments around the world to be more sustainably managed. The ability to recycle PLA-coated paperboard empowers brand owners, retailers, hospitality outlets and waste management companies to work with a biobased packaging solution that can be either composted or recycled depending on what is most environmentally efficient for that specific application. We are extremely proud to be contributing even further towards driving the circular economy forward”.*

**For more information on how to make the switch to biobased PLA, please contact us.**

### END PRESS RELEASE

Photos available to download here (link valid 7 days from publication date): <https://we.tl/t-KR0HHrBHXO>

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#### **About Total Corbion PLA**

Total Corbion PLA is a global technology leader in Poly Lactic Acid (PLA) and lactide monomers. PLA is a biobased and biodegradable polymer made from annually renewable resources, offering a reduced carbon footprint versus many traditional plastics. The Luminy® PLA portfolio, which includes both high heat and standard PLA grades, is an innovative material that is used in a wide range of markets from packaging to consumer goods, fibers and automotive. Total Corbion PLA, headquartered in the Netherlands, operates a 75,000 tons per year PLA production facility in Rayong, Thailand and has recently announced the intention to build a second plant in Grandpuits, France. The company is a 50/50 joint venture between TotalEnergies and Corbion. [www.total-corbion.com](http://www.total-corbion.com)

#### **About TotalEnergies**

TotalEnergies is a broad energy company that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity. Our 105,000 employees are committed to energy that is ever more affordable, clean, reliable and accessible to as many people as possible. Active in more than 130 countries, TotalEnergies puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people. [www.totalenergies.com](http://www.totalenergies.com)

#### **About Corbion**

Corbion is the global market leader in lactic acid and its derivatives, and a leading supplier of emulsifiers, functional enzyme blends, minerals, vitamins, and algae ingredients. We use our unique expertise in fermentation and other processes to deliver sustainable solutions for the preservation of food and food production, health, and our planet. For over 100 years, we have been uncompromising in our commitment to safety, quality, innovation and performance. Drawing on our deep application and product knowledge, we work side-by-side with customers to make our cutting-edge technologies work for them. Our solutions help differentiate products in markets such as food, home & personal care, animal nutrition, pharmaceuticals, medical devices, and bioplastics. In 2020, Corbion generated annual sales of € 986.5 million and had a workforce of 2,267 FTE. Corbion is listed on Euronext Amsterdam. [www.corbion.com](http://www.corbion.com)

**Luminy®**

PLA bioplastics for a brighter future  
Biobased • Compostable • Innovative

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