



MEASURING WHAT MATTERS

Sustainable biobased materials

11th Circular Biobased Products
Symposium

Global biobased ingredients provider with unique technology platform

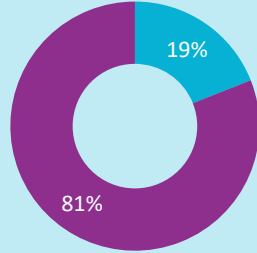
€1.44BN
net sales

€191.8M
Adjusted EBITDA

2,727
Employees

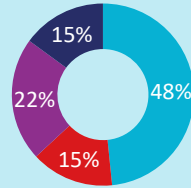
Key figures (2023)

NET SALES CORE*

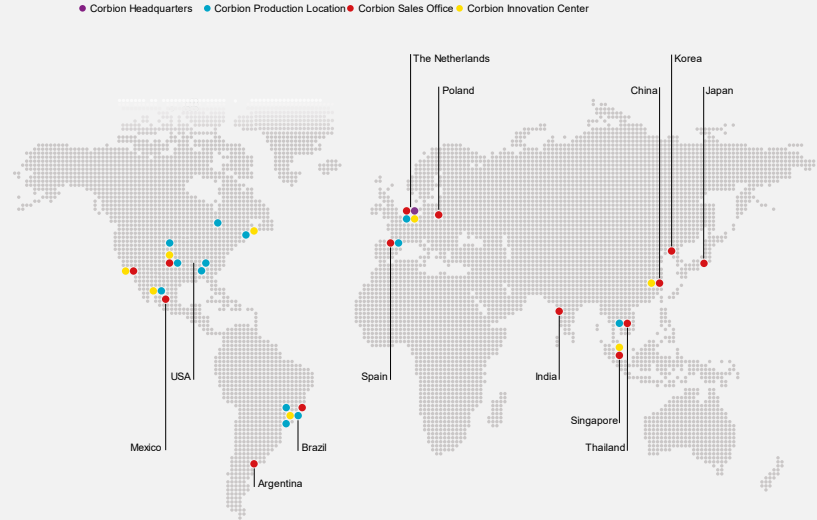


■ Health & Nutrition

NET SALES PER REGION

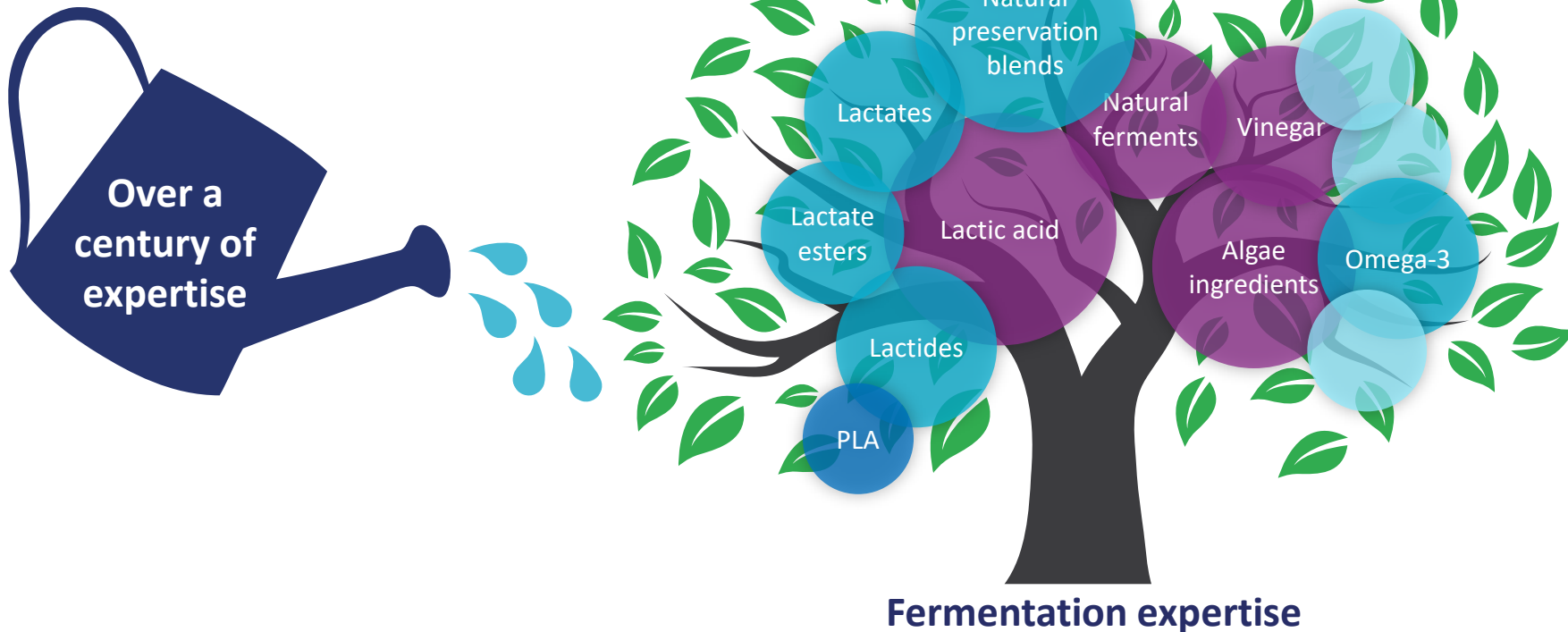


■ North America ■ Latin America



- Largest producer of lactic acid with global footprint
- Leading market positions in sustainable food solutions
- Unique technology platform: fermentation
- 13 manufacturing facilities, 8 innovation centers, and sales offices across the world

Fermentation powerhouse - our key production technology



At Corbion we preserve what matters

Portfolio aligned to SDGs



2 ZERO HUNGER

We help preserve **> 8 million tons** of food globally

AlgaPrime DHA enables sustainable aquaculture growth to feed **10 billion people** by 2050

Our sustainable food ingredients help control food-borne pathogens.



3 GOOD HEALTH AND WELL-BEING

Resorbable orthopedic implants reduce follow-up surgery which improves health care affordability

New circular lactic acid technology with a **34 % lower carbon footprint**



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

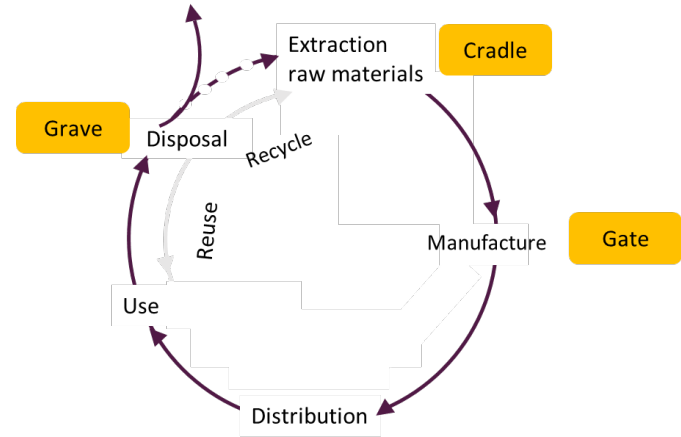
Bioplastics produced from renewable resources are key to **decouple plastics from fossil feedstocks**

Life Cycle Assessment of our products

Corbion uses Life Cycle Assessments (LCA) as a tool to understand the environmental impacts of a product from the extraction of resources to their use and end of life

To support carbon footprint labeling for our customers, we will perform LCAs for > 90% of products manufactured by Corbion by 2025

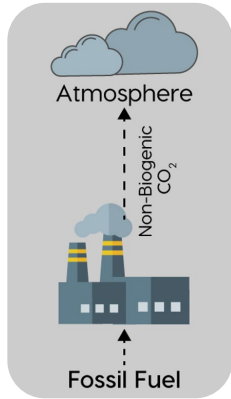
LCAs comply with ISO 14040/44, Carbon footprint ISO 14067



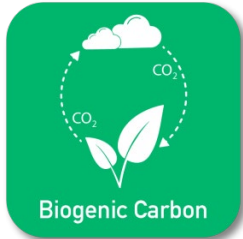
Impact categories relevant for biobased products

CO₂

- Carbon footprint
- Climate change
- GHG emissions
- Global warming potential



Bio-based products



Defossilization of chemicals & materials

Agriculture related impacts



Land use



Eutrophication



Water



Acidification



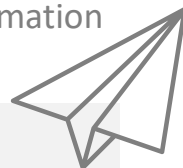
Particulate matter

Energy/combustion related impacts

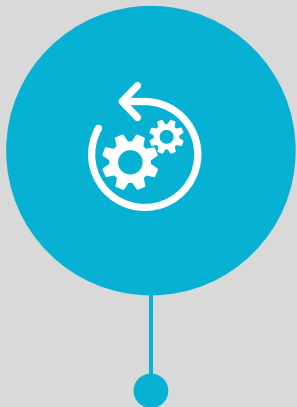
- Biodiversity
- Freshwater toxicity
- Human toxicity

Why do we perform LCA

Digitalization & automation

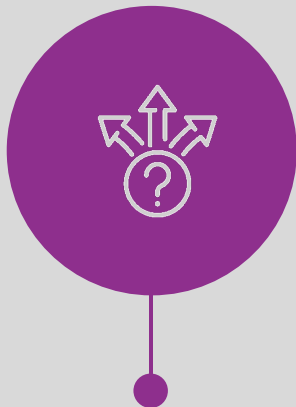


Internal



DRIVE INNOVATION

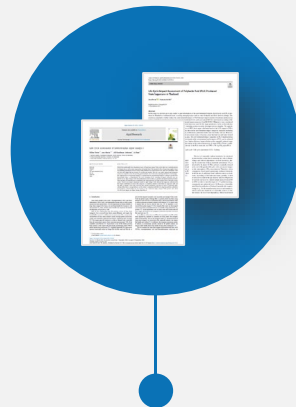
- Integrated in idea to launch, incl. process & product design
- Climate transition roadmap



DECISION MAKING

Examples: location, technology choice

External



EXTERNAL COMMUNICATIONS

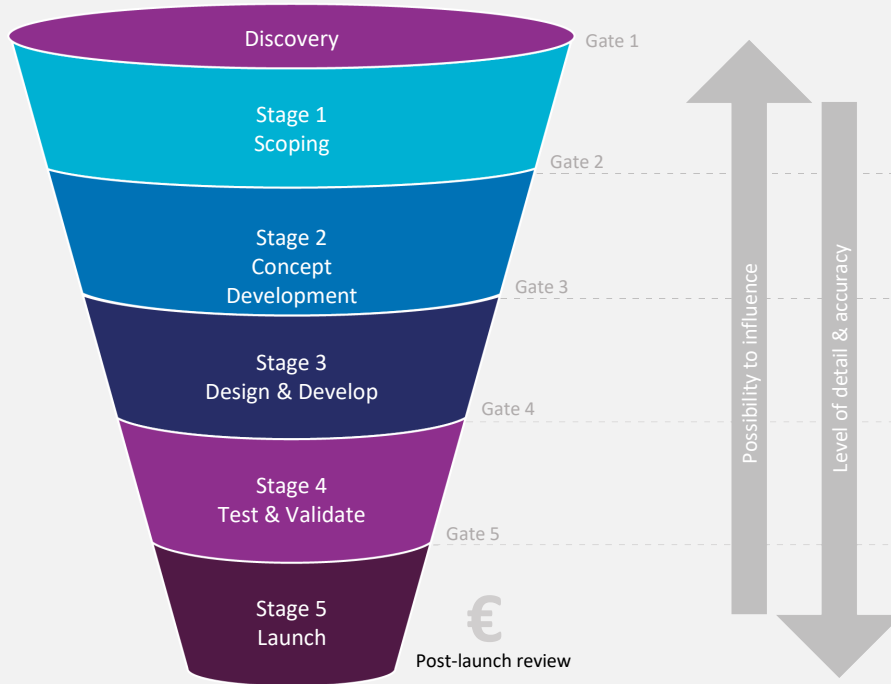
- Transparency and collaboration
- Share LCA with costumers



CORPORATE TARGETS

- > 90 % products with LCA by 2025
- Started in 2017. In 2022 we had > 400 products with LCA (cradle-to-gate)

Sustainability assessment in Corbion idea-to-launch process

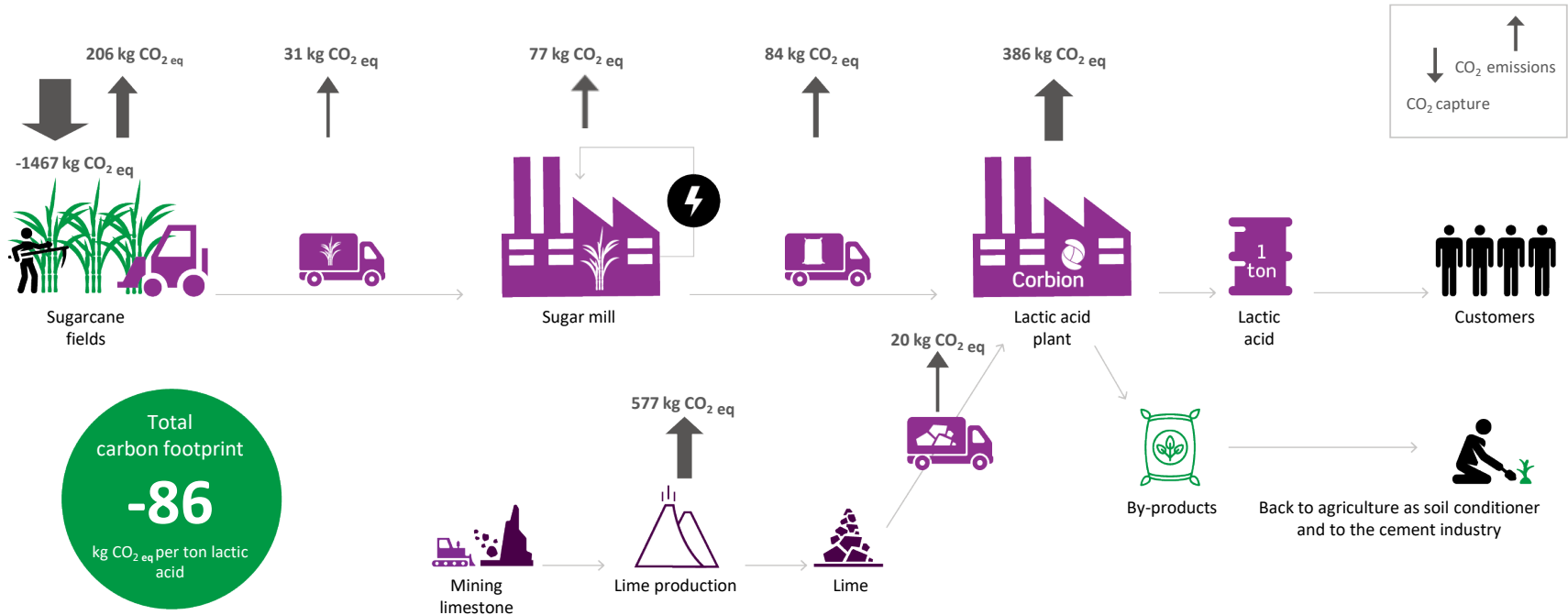


Topics Assessed

- Sustainable Development Goals
- Environmental impact
- Responsible sourcing
- Chemicals safety

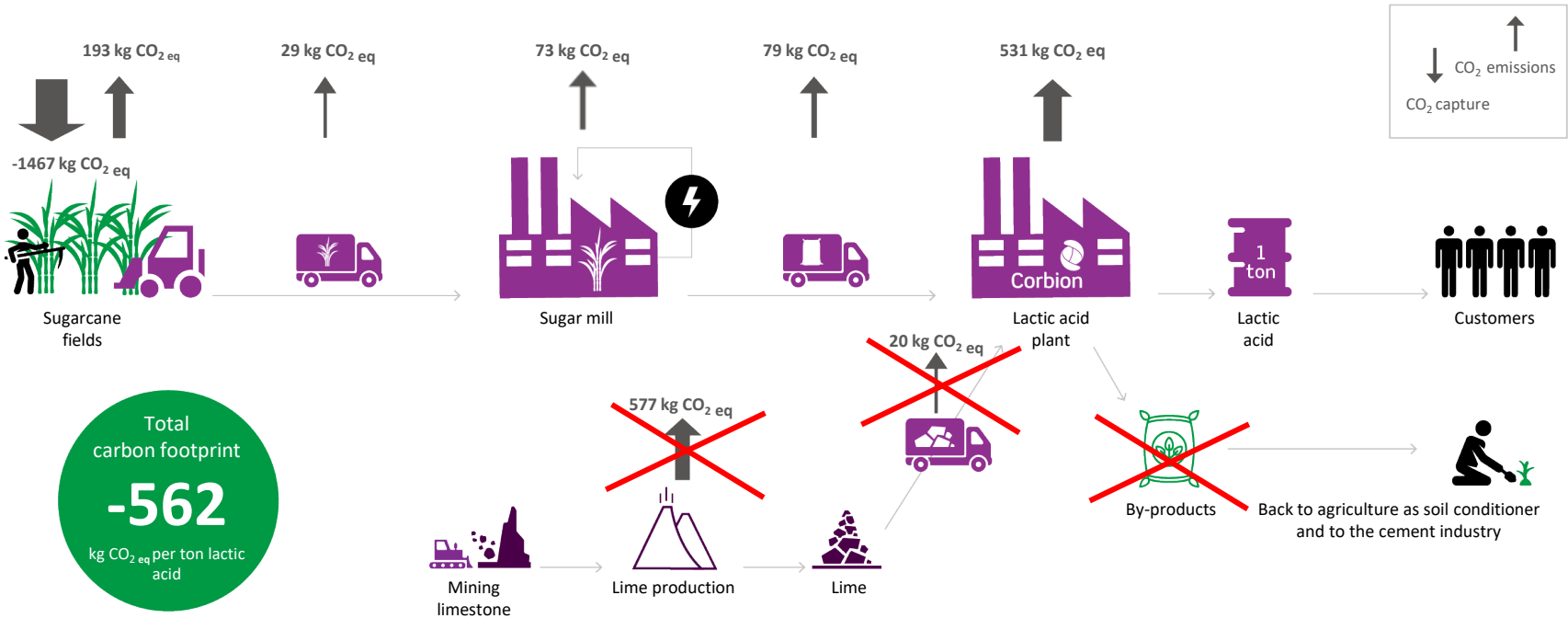
At each stage, the assessment is updated and the progress on agreed actions is checked. These actions aim to improve sustainability of the project and include mitigation plans to reduce the environmental impact (climate change, water, resources), obtain on supporting documentation for SDG alignment and supplier risk assessments.

Carbon footprint conventional lactic acid production (Thailand 2022)



Based on third party reviewed study Environmental footprint of Lactic acid from Thailand, Corbion 2022

Carbon footprint circular lactic acid production



Flagship circular lactic acid plant

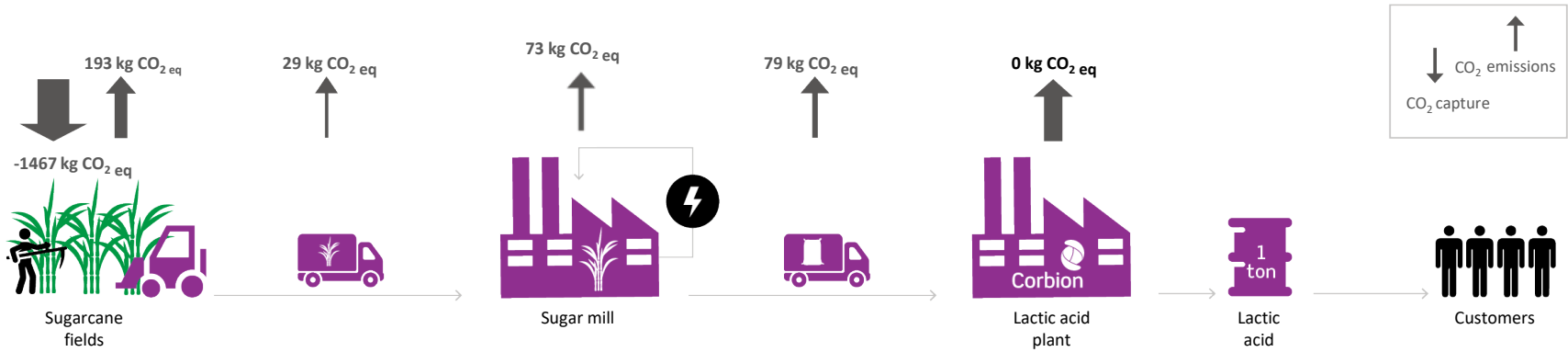


**125kt plant
located in
Thailand**

**Eliminates
production of
gypsum as
byproduct**

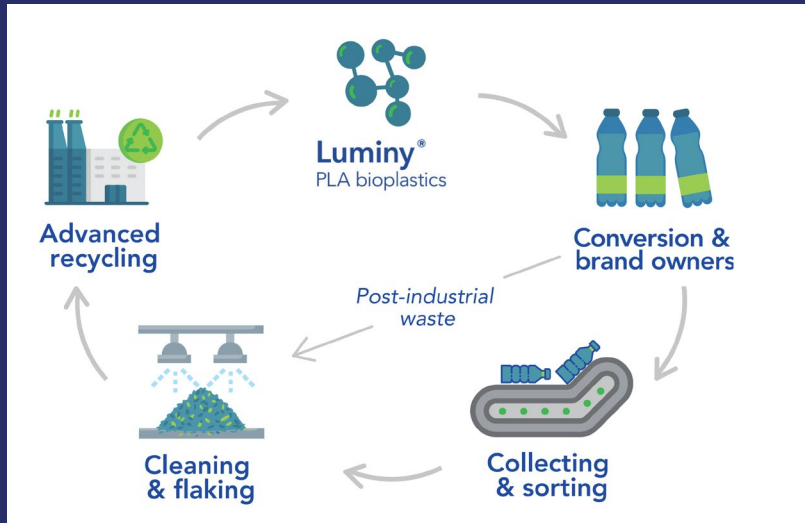
**Lowest carbon
emissions
process**

Future ambition



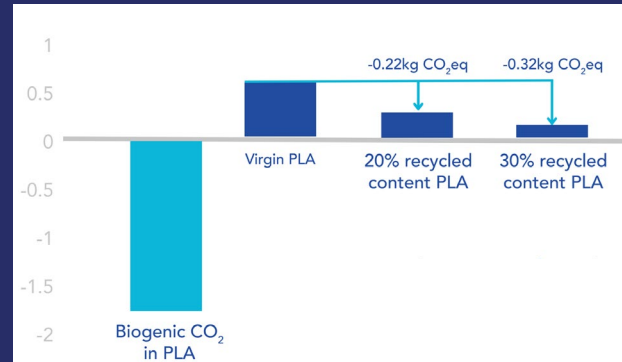
Advanced recycling of PLA bioplastic

Luminy® rPLA advances circularity and sustainability by decoupling biobased plastics production from land use and agricultural impacts. This rPLA retains biogenic carbon from its initial life cycle, allowing for extended carbon storage in the biobased material.



Carbon Footprint

(kg CO₂ eq / kg polymer. Cradle-to-gate including -1.83 kg CO₂ absorption/kg PLA)



Sources: *J Polym Environ* 27, 2523–2539 (2019);
Resources, Conservation and Recycling 149, no. July (2019)

Preserving what matters

It is time to act, together

Measuring what matters

Scientific approach to quantify sustainability

Transparency

Reliable data sharing for informed decision making

Collaboration

The way to address the global challenges