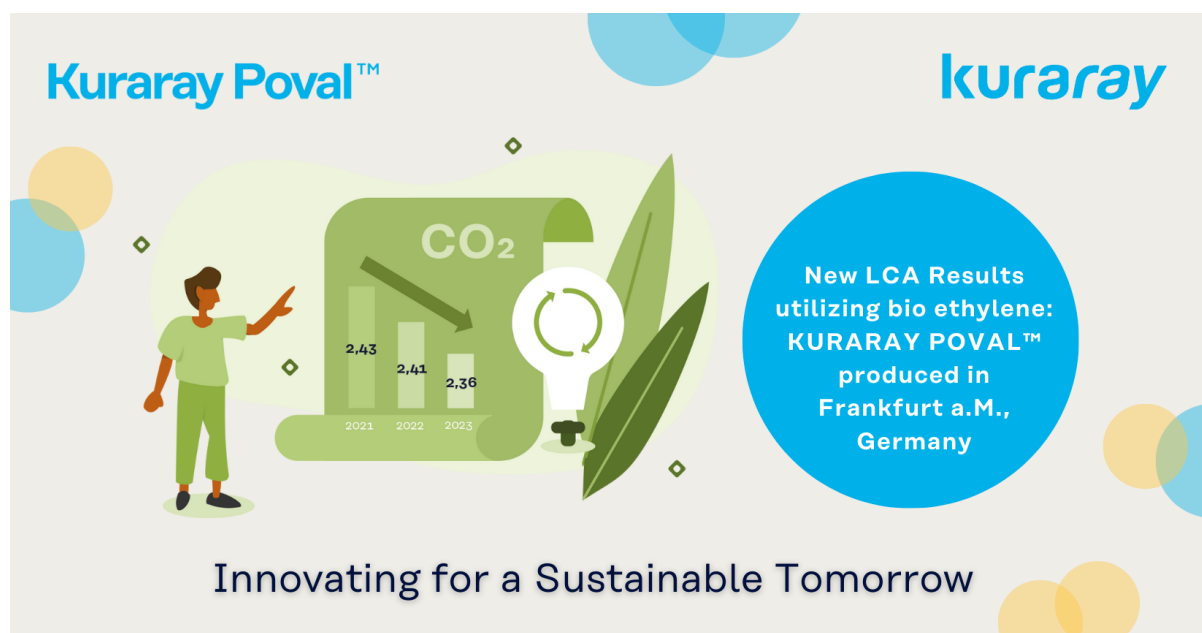


Kuraray Achieves a New Milestone with Reduced CO2 Footprint



Kuraray is proud to announce a significant achievement in the sustainability journey. Our latest Life Cycle Assessment (LCA) for KURARAY POVAL™ polyvinyl alcohol (PVOH) products, manufactured in Frankfurt, demonstrates a remarkable reduction in the carbon footprint. Using the cradle-to-gate approach, the assessment shows that the new "total climate change" value for 1 kg of KURARAY POVAL™ is now **1.62 kg CO2 equivalent**.

This new value is based on the utilization of **bio ethylene**, which has significantly contributed to the reduction in our carbon footprint. In comparison, the LCA values for previous years were:

- 2021: 2.43 kg CO2 equivalent
- 2022: 2.41 kg CO2 equivalent
- 2023: 2.36 kg CO2 equivalent.

By integrating bio ethylene into our production process, we are making substantial strides towards a more sustainable future, aligning with our core company values.

Contact us for technical advice and commercial inquiries related to our PVOH (PVA) portfolio via your familiar Poval Customer Service representative or through our [contact form](#).

The following internal calculation conditions apply:

Reference Standards/Guidelines: ISO14040, ISO14044 and ISO14067. System Boundary: Cradle to Gate.
Calculation Software: LCA for Experts (GaBi) (provided by Sphera Solutions GmbH). Database: Managed LCA Content (MLC) ver. 2023.2 (provided by Sphera Solutions GmbH). Impact Assessment Methodology: IPCC AR6 GWP 100.

Notes:

A cut-off rule was applied for some minor raw materials within the range of 2% or less of the total input weight to the process subject to the calculation. Mass allocation of all GHG emissions of the plant was applied to the main product and a co-product. The CO₂ emission factor for bio-based feedstock is based on data from the database (i.e., secondary data).

The data presented in this document is based on information available at the time of calculation. While every effort has been made to ensure its accuracy, we do not guarantee its accuracy or completeness.