



# All in One: Polyurethane Foam Mattress for Your Best Sleep and a Sustainable Future. How?

## PROJECT DESCRIPTION

A growing number of companies across the globe have to deal with the challenge of phasing out fossil-based raw materials with those that are more sustainable and have a significantly lower impact on the environment.

In this regard, mass balance approach offers the industry an opportunity to progress further and to accelerate the sustainability transformation. But, what is mass balance and how does it work?

The mass balance approach is a certified and widely used method to introduce more sustainable raw materials into complex production chains. In this method, fossil-based materials are replaced by sustainably sourced renewable ones derived from e.g., bio-circular sources (e.g. used cooking oils) in an early stage of raw material extraction and later attributed to the finished products. Manufacturers can use these materials in production without any need to change their formulations, equipment, and processes. The potential is enormous and allows manufacturers to gradually transform their product portfolio towards a more sustainable one and achieve their climate goals.

Covestro manufactures the renewable-attributed raw materials, such as toluene diisocyanate (TDI) and polyether, in major European, US and Asian production sites, certified according to the ISCC\* PLUS standard.

\*International Sustainability and Carbon Certification

## PROJECT IMPACT

It is possible to achieve up to 74% carbon footprint reduction with Covestro's more sustainable TDI products, featuring a 51% sustainable share. Their conventional polyether products offer up to 100% carbon footprint reduction, with a sustainable share of approximately 86%.

By leveraging the advantages of ISCC PLUS-certified TDI & polyether, PU foam producers can seamlessly transition towards sustainability while maintaining their existing formulations, equipment, and processes. The mass balance methodology enables to incorporate renewable-attributed raw materials, thereby reducing indirect emissions throughout the supply chain.

As a result, customers not only have the opportunity to gradually transform their product portfolio into more sustainable options but also make progress towards achieving their climate goals by offering products with a significantly reduced carbon footprint.



Recognized by Interzum's "High Product Quality" Award in 2023, Orbis™ Plus MB foam from The Vita Group is its latest innovation of flexible polyurethane (PU) foam made with raw materials sourced from renewable and recycled sources. TDI, being a vital component of this product, is produced by Covestro with ISCC\* PLUS-certified feedstock.

## ABOUT COVESTRO

Covestro AG is a German company based in Leverkusen employing 17,895 people worldwide. It is among the leading suppliers of premium polymers. Their materials and application solutions are found in nearly every area of modern life. Innovation and sustainability are the driving forces behind the continuous development of their products, processes and facilities.

## CONTACT

Jacqueline Godder | Dennis Wagner  
Marketing Managers Consumer Industries  
[jacqueline.godder@covestro.com] | [dennis.wagner@covestro.com]

## LEARN MORE

Visit [www.solutions.covestro.com](http://www.solutions.covestro.com)