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PROPLANET

Enhanced Safe and Sustainable coatings for supporting the Planet




FIRST PRESS RELEASE

Our Project

PROPLANET is a Horizon Europe project titled “Enhanced Safe and Sustainable coatings for supporting the Planet”, funded under the topic HORIZON-CL4-2022-RESILIENCE-01-23. We are a multi-disciplinary consortium consisting of 7 SMEs, 3 RTO, 1 large company, 1 university and 1 NPO with R&D capacities, from 9 EU Countries.

The concept

PROPLANET aims to substitute the existing per- and polyfluoroalkyl substances-type coatings, by designing and optimising 3 innovative solutions.

-  **Hydrophobic, oleophobic bio-based coating**
-  **Non-stick and anticorrosion protection bio-based hybrid coating, and**
-  **Anti-soiling anti-reflecting hybrid coating**

Novel coating material solutions will help to address the problem from a sustainable-business perspective and overcome barriers to environmental protection, safety, chemical improvements, and circular value chains. All coatings are designed based on **Safety and Sustainability by design (SSbD)** concepts and optimised with mathematical computational tools. Moreover, replication studies through the aid of the PROPLANET Replication tool based on data-driven algorithms and multi-objective optimization will promote the integration of the novel coatings on different applications, supporting their route to market, operating at different conditions, and following an eco-design thinking.

The applications

The developed coatings find industrial applications in



**Technical
Textiles
Application**



**Low maintenance glass
(e.g. car windows,
shower glass)**

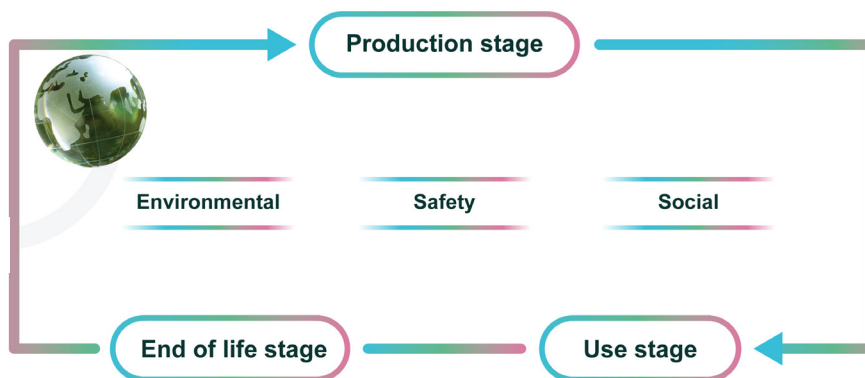


**Food Packaging
Machinery
Application**

Why choosing Safe & Sustainable by Design approaches?

SSbD, according to OECD, can be described as an approach that focuses on providing a function or service, while minimizing environmental footprints and avoiding chemicals that may be harmful to human health or the environment.

PROPLANET will cover the whole value chain, creating circularity by considering different stages: i) sourcing, conversion and pre-treatment, ii) disruptive and enhanced production at an industrialisation system up to TRL5, iii) end-user testing, and iv) next-use activities at all stages of manufacture, including end-of-life (recycle, and reuse).



PROPLANET Kick-off meeting

The PROPLANET consortium met physically for the first time in Seville on the 21st and 22nd of February 2023, in a meeting hosted by our coordinator IDENER.

The consortium presented to the Project Officer and to each other the targets, plan and expected outcomes throughout the project. This was an excellent opportunity for all partners to meet in person and build a collaborative plan for the upcoming months. Discussions continued during an interesting city tour and a nice dinner in Seville city center.



 idener.ai

