

**Enhanced Safe and Sustainable coatings for supporting the Planet** 

## NEWSLETTER

Issue 5, JUNE 2025



## IN THIS ISSUE:

- 1. Updates on PFAS Regulations
- 2. SSbD Guidance
- 3. PROPLANET Featured at Cordis
- 4. Updates from the PROPLANET Replication Tool
- 5. Attendance to Events
- **6. PROPLANET Meetings**
- 7. New PROPLANET Publication

- 8. International Cooperation
- 9. PROPLANET Blog Articles
- 10. Stakeholders' Engagement
  - 3<sup>rd</sup> Streaming Event
- 11. Clustering Activities
- 12. Upcoming Actions
- 13. PROPLANET's Fun Corner



## www.proplanet-project.eu | info@proplanet-project.eu

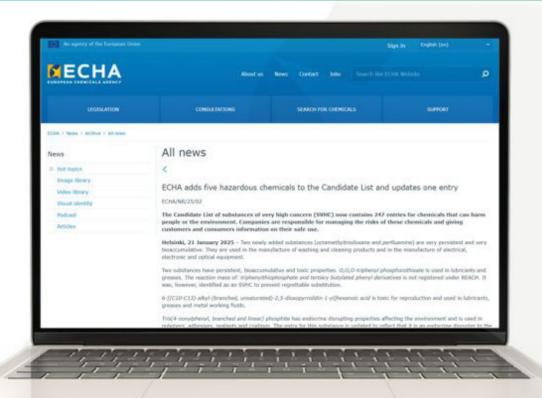


Funded by the European Union under the GA no 101091842. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or HADEA. Neither the European Union nor the granting authority can be held responsible for them.



## Enhanced Safe and Sustainable coatings for supporting the Planet





## **UPDATES ON PFAS REGULATIONS**

On January 21<sup>st</sup>, 2025, the European Chemicals Agency (ECHA) announced the addition of five hazardous chemicals to the Candidate List of Substances of Very High Concern (SVHC), bringing the total to 247 entries. These substances pose serious risks to human health and the environment, reinforcing the need for stricter chemical safety and transparency. Companies using these substances are now required to manage associated risks and inform customers and consumers about their safe use. This update is highly relevant for projects like PROPLANET, which aim to develop safer, PFAS-free alternatives.

Read the full announcement: <a href="https://lnkd.in/d-yZPgsV">https://lnkd.in/d-yZPgsV</a>

In the meanwhile, on February 27<sup>th</sup>, 2025, France enacted Law No. 2025-188, introducing a sweeping ban on PFAS (per- and polyfluoroalkyl substances) in cosmetics, textiles, and ski waxes starting January 2026, with a broader ban on all PFAS-containing textiles by 2030. The law also mandates PFAS monitoring in drinking water, imposes a pollution tax on industrial discharges, and outlines a five-year plan to eliminate PFAS emissions into water systems. These measures reflect growing concern over the health and environmental risks posed by these persistent "forever chemicals."

The PROPLANET Project fully supports this regulatory shift, working to develop PFAS-free, bio-based coatings for textiles, food packaging, and glass. Our mission aligns with France's bold action and the EU's broader efforts to phase out harmful substances in favor of safe and sustainable alternatives.

Check the full article here: https://www.ecowatch.com

## SSbD GUIDANCE CEFIC RELEASES NEW SSbD GUIDANCE | MARCH 2025



We are excited to share that Cefic (The European Chemical Industry Council) has officially released its comprehensive guidance titled "Safe and Sustainable-by-Design: A Guidance to Unleash the Transformative Power of Innovation".

This document provides practical, actionable advice for companies aiming to integrate SSbD principles across the entire research and innovation lifecycle—from early design stages to market placement. It supports the goals of the EU Green Deal and the Chemicals Strategy for Sustainability, helping industries transition toward climate neutrality, circularity, and safer chemical innovation.

The PROPLANET Project strongly supports this initiative, as it aligns with our mission to develop PFAS-free, bio-based coatings for textiles,

packaging, and glass. By applying SSbD principles, we ensure that our innovations are not only effective but also safe for people and the planet throughout their life cycle. Read the full guidance here

## PROPLANET AT IRISS SSbD INDUSTRY CASE STUDIES WEBINAR | 6 FEBRUARY 2025 | ONLINE



On February 6<sup>th</sup>, the IRISS – International SSbD Network hosted a highly engaging webinar focused on Safe and Sustainable by Design (SSbD) Industry Case Studies. The event featured insightful presentations from the Joint Research Centre (JRC) of the European Commission and Cefic, offering valuable perspectives on how SSbD principles are being applied across sectors. Experts shared key findings, practical recommendations, and real-world examples that are helping shape the future of sustainable innovation. The PROPLANET Project supports and benefits from such knowledge-sharing initiatives, as they reinforce our commitment to integrating SSbD into the development of PFAS-free, bio-based coatings.

Missed the session? The recording is available on the IRISS member platform: <a href="https://community.iriss-ssbd.eu">https://community.iriss-ssbd.eu</a>



## PROPLANET FEATURED AT CORDIS



We would like to announce that the PROPLANET Project has been spotlighted in the CORDIS News – Results in Brief section. This recognition highlights our commitment to developing sustainable, PFAS-free coatings that not only enhance product performance but also contribute to a healthier environment. Being featured by CORDIS underscores the impact of our work and the importance of advancing safe and innovative solutions for a greener future.

Check out the full article: <a href="https://lnkd.in/duzsTpQJ">https://lnkd.in/duzsTpQJ</a>

## **UPDATES FROM THE PROPLANET REPLICATION TOOL**

## Beta Launch: PROPLANET Replication Tool by IDENER.AI | A Major Milestone

We are excited to announce the beta release of the PROPLANET Replication Tool, developed by IDENER.AI. This advanced digital platform is designed to streamline material analysis and enhance scientific decision-making across the project.

The tool integrates key features from several project partners:

- · Material management and analysis modules
- First-principle simulations by RINA to predict coating properties
- Environmental fate modeling by NovaMechanics Ltd
- Formulation optimisation by Universidad de Málaga
- Toxicity estimations by NILU, targeting environmental safety.

Together, these components offer a comprehensive, data-driven approach to designing PFAS-free coatings that are both effective and environmentally responsible. Stay tuned for more updates as we refine and expand this powerful tool.



## **ATTENDANCE TO EVENTS**

WORKSHOP HIGHLIGHT

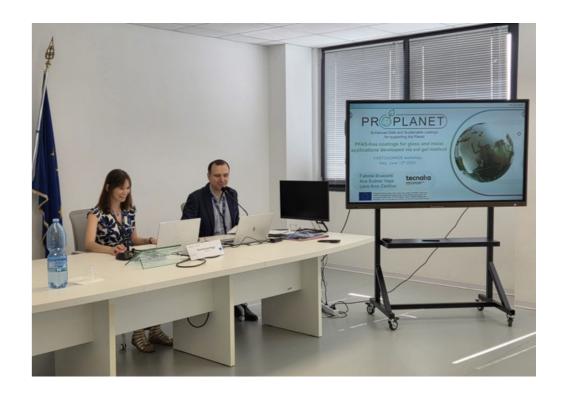
- FASTCH2ANGE

PROJECT MEETING |

12 JUNE 2025 | LAMEZIA

TERME, ITALY

On June 12th, Dr. Ana
Suárez Vega and
Dr. Fabiola Brusciotti
from Tecnalia proudly
represented the
PROPLANET Project
at a dynamic clustering
workshop hosted by the
FASTCH2ANGE Project,
coordinated by RINA-



CSM. The event brought together several cutting-edge EU-funded initiatives, including Tornado, MIRIA, TERASUN, Smartweld, and COOPERANT, alongside pioneering hydrogen research from RINA-CSM, VTT, and Fraunhofer ISE. The PROPLANET team shared the latest advancements in sustainable materials and PFAS-free coatings, contributing to a vibrant exchange of ideas and fostering new synergies across the European innovation landscape.

## PROPLANET at ACI | Biobased Coatings Europe 2025 Madrid, Spain, 4-5 June 2025

## PROPLANET AT ACI BIOBASED COATINGS EUROPE 2025 | 4-5 JUNE 2025 | MADRID, SPAIN

Earlier this month, HOLOSS represented the PROPLANET Project at the ACI Biobased Coatings Europe 2025 conference. The event brought together key stakeholders from across the coatings value chain — from industry leaders to research institutions — to explore the future of sustainable coatings. Discussions focused on critical topics such as raw material sourcing, regulatory compliance, and strategies to reduce carbon footprints. PROPLANET's presence highlighted its commitment to advancing PFAS-free, eco-friendly coating solutions, reinforcing its role in shaping a greener, more responsible coatings industry.

## Enhanced Safe and Sustainable coatings for supporting the Planet

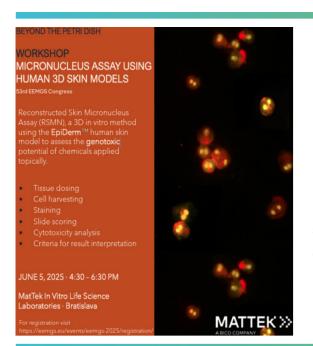


## **ATTENDANCE TO EVENTS**



## PROPLANET AT EEMGS 2025 | 2-5 JUNE 2025 | BRATISLAVA, SLOVAKIA

On June 2-5 NILU participated in the 53<sup>rd</sup> EEMGS Congress, held in conjunction with the 47<sup>th</sup> Annual Meeting of the Czech and Slovak Society for Mutagenesis and Carcinogenesis (CSSMC) in Bratislava, Slovakia. During the poster session, NILU presented the PROPLANET Project, contributing to the congress theme: "Safeguarding Genomic Integrity: Bridging Science and Public Health in Environmental Mutagenesis." Learn more: <u>EEMGS 2025 - EEMGS</u>



## PROPLANET AT THE COMET ASSAY WORKSHOP – OECD WNT | 5 JUNE 2025 | BRATISLAVA, SLOVAKIA

On June 5<sup>th</sup>, NILU took part in the Comet Assay Workshop organised under the OECD Working Group of National Coordinators for the Test Guidelines Programme (WNT). Hosted at MatTek In Vitro Life Science Laboratories, this hands-on session combined theoretical insights with practical demonstrations, focusing on genetic toxicology, regulatory science, and the development of non-animal testing methods for chemical safety. NILU's participation highlighted the PROPLANET Project's alignment with cutting-edge, ethical approaches to chemical risk assessment and its commitment to advancing safer, PFAS-free innovations.

### NIC AT ISNT 2025 | 29-30 MAY 2025 | LJUBLJANA, SLOVENIA

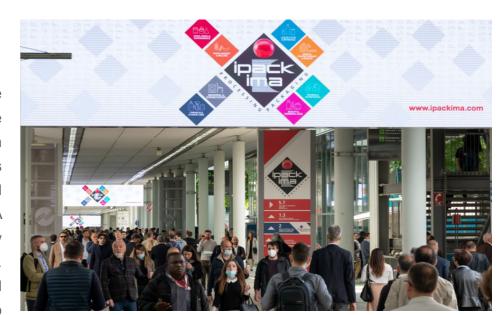
The National Institute of Chemistry (NIC) proudly participated in the 50<sup>th</sup> International Symposium on Novelties in Textiles (ISNT 2025), held in Ljubljana, Slovenia. This milestone event brought together researchers, students, and industry leaders to explore the latest breakthroughs in textile materials, technologies, and design. NIC contributed to engaging discussions on the future of sustainable textiles and smart material solutions, sharing insights from the PROPLANET Project and reinforcing its commitment to innovation in eco-friendly textile development.

Find out more: <a href="https://lnkd.in/djAbEDe5">https://lnkd.in/djAbEDe5</a>



## PROPLANET AT IPACK-IMA 2025 | 27–30 MAY 2025 | MILAN, ITALY

REEPACK showcased the PROPLANET Project at the prestigious IPACK-IMA2025 exhibition in Milan, Italy. As one of Europe's leading events for processing and packaging technologies, IPACK-IMA gathered innovators and industry leaders from around the globe. REEPACK's presentation highlighted PROPLANET's contributions to



sustainable packaging solutions, with a focus on PFAS-free materials and eco-conscious design.

Find out more: <a href="https://www.ipackima.com/">https://www.ipackima.com/</a>

PROPLANET AT THE 19<sup>TH</sup> EUROPEAN TEXTILE PLATFORM ANNUAL CONFERENCE | 12–14 MAY 2025 | ALCOY, SPAIN



AITEX participated in the 19th European Textile Platform (ETP) Annual Conference, hosted at its own facilities in Alcoy, Alicante, Spain. This key event brought together stakeholders from across the European textile innovation ecosystem to discuss the latest trends, challenges, and breakthroughs in the sector. At their booth, AITEX showcased the PROPLANET Project, highlighting its contributions to sustainable textile development and PFAS-free coating technologies.

Learn more: <a href="https://www.textile-platform.eu/events/">https://www.textile-platform.eu/events/</a> textite-etp-annual-conference-2025

## Enhanced Safe and Sustainable coatings for supporting the Planet



## **ATTENDANCE TO EVENTS**

PROPLANET AT IFFA 2025 | 3–8 MAY 2025 | FRANKFURT, GERMANY

From May 3–8, REEPACK represented the PROPLANET Project at IFFA 2025, the world's leading trade fair for the meat and protein industry, held in Frankfurt, Germany. The PROPLANET roll-up display attracted attention from industry professionals, highlighting our innovative work on PFAS-free, sustainable coatings for food packaging machinery. The event provided an excellent opportunity to engage with global stakeholders, share insights, and raise awareness about PROPLANET's mission to drive eco-conscious innovation in



food processing and packaging. Find out more about the event: https://iffa.messefrankfurt.com/frankfurt/en.html



## PROPLANET AT THE PFAS & BIOECONOMY WEBINAR | 28 MARCH 2025 | ONLINE

On March 28th, the PROPLANET Project took part in the webinar "PFAS & Bioeconomy – General Introduction, Bio-based Alternatives and PFAS-free Solutions", organised by BIOECONOMY for Change. The session featured presentations from several innovative projects, including Celabor, BIOSUPHYOL, BIO-SUSHY, Wood K plus, and BioHalo. The PROPLANET consortium shared insights into the project's concept, the PFAS materials being addressed, target applications, and the Safe and Sustainable by Design (SSbD) approach guiding the developments. The event concluded

with a panel discussion on the future of sustainable coatings, highlighting the importance of collaboration in driving bio-based innovation forward. Check out the agenda: <a href="https://www.bioeconomyforchange.eu">https://www.bioeconomyforchange.eu</a>

## PROPLANET AT THE NSC COMMUNITY STEERING GROUP MEETING | 14 MARCH 2025 | ONLINE

On March 14th, the PROPLANET Project was presented at the NSC Community Steering Group Meeting, where our coordinator Johannes Seif introduced the project's goals and progress, including our work on PFAS-free materials and the SSbD approach. The session also offered valuable updates on upcoming events and collaboration opportunities, reinforcing



PROPLANET's role in the broader effort to advance sustainable and safe chemical innovation in Europe.

## PROPLANET AT FORO RETOS Y TENDENCIAS EN TRATAMIENTOS SUPERFICIALES | 5 FEBRUARY 2025 | BURGOS, SPAIN

On February 5<sup>th</sup>, TECNALIA presented the PROPLANET Project at the FORO Retos y Tendencias en Tratamientos Superficiales in Burgos, Spain. The event gathered experts to discuss the latest challenges and innovations in surface treatments. TECNALIA highlighted PROPLANET's work on PFAS-free coating technologies, contributing to the dialogue on sustainable and advanced material solutions.



## PROPLANET Jensay 29 86, 2025 NILU at the Norwagian Society for Pharmscology & Toxicology Conference nilu

## PROPLANET AT NSFT WINTER MEETING 2025 | 23–25 JANUARY 2025 | BEITO, NORWAY

NILU presented the PROPLANET Project during the poster session at the NSFT Winter Meeting 2025, with over 200 participants from the scientific community. Dr. Eleonora Longhin showcased her work titled "Development of PFAS-free coatings in a Safe and Sustainable by Design (SSbD) approach", contributing to discussions on sustainable materials and environmental safety. The event highlighted the importance of collaborative research in advancing green innovation.

Find out more: https://nsft.no/vintermote/winter-meeting-2025/

## AITEX AT ADD-ITC 2024 | 21–22 NOVEMBER 2024 | STUTTGART, GERMANY

AITEX participated in the Aachen-Dresden-Denkendorf International Textile Conference (ADD-ITC 2024), held in Stuttgart, Germany, between 21–22 November 2024. With over 450 participants from 25 countries, the event served as a global hub for cutting-edge textile research and innovation. Dr. Òscar Calvo presented the PROPLANET Project during the poster session, showcasing our progress in PFAS-free textile coatings and sustainable material solutions. It was a valuable opportunity to connect with international experts and share our vision for a greener textile future.





## **PROPLANET MEETINGS**

## PROPLANET AT JOINT SISTER PROJECTS MEETING | 5 MAY 2025 | ONLINE

On May 5th, HOLOSS represented the PROPLANET Project at the first joint meeting with our sister projects (BIO-SUSHY, ZeroF, and Tornado), focusing on shared challenges in Life Cycle Assessment (LCA). This collaborative session marked an important step toward aligning methodologies and identifying common barriers—particularly the lack of high-quality data and limited literature for benchmarking and upscaling sustainable innovations. The discussion set the stage for more in-depth exploration of both technical and social aspects in future meetings. By working together, these projects aim to strengthen their collective impact and accelerate the transition to PFAS-free, sustainable solutions across sectors.



## PROPLANET General Assembly Meeting hosted by HOLOSS Portugal, 5-6 March 2025

## PROPLANET GENERAL ASSEMBLY | 5-6 MARCH 2025 | MONÇÃO, PORTUGAL

We are excited to share highlights from the PROPLANET Project's General Assembly, held on March 5–6, 2025, in the beautiful town of Monção, Portugal, and graciously hosted by our HOLOSS partner. This in-person gathering brought together project partners from across Europe to present progress updates, exchange insights, and collaboratively address ongoing challenges in the development of PFAS-free, sustainable coatings. The agenda featured a series of engaging presentations, technical discussions, and strategic planning sessions aimed at aligning efforts for the next project phase. The first day concluded with a warm and lively social event and group dinner.

## PROPLANET ONLINE INTERNAL MEETING & WORKSHOP | 15 JUNE 2025

The PROPLANET Project Consortium came together for a productive online meeting, focused on enhancing our dissemination and communication strategies and exploring new tools to boost exploitation as well as project visibility and impact.

Led by EXELISIS, the session introduced valuable EU platforms such as the <u>Horizon</u> Results Platform and <u>Innovation Radar</u>, which offer exciting opportunities for showcasing and exploiting our project outcomes. The workshop sparked insightful discussions and equipped partners with practical tools to maximise the reach and value of PROPLANET's innovations.



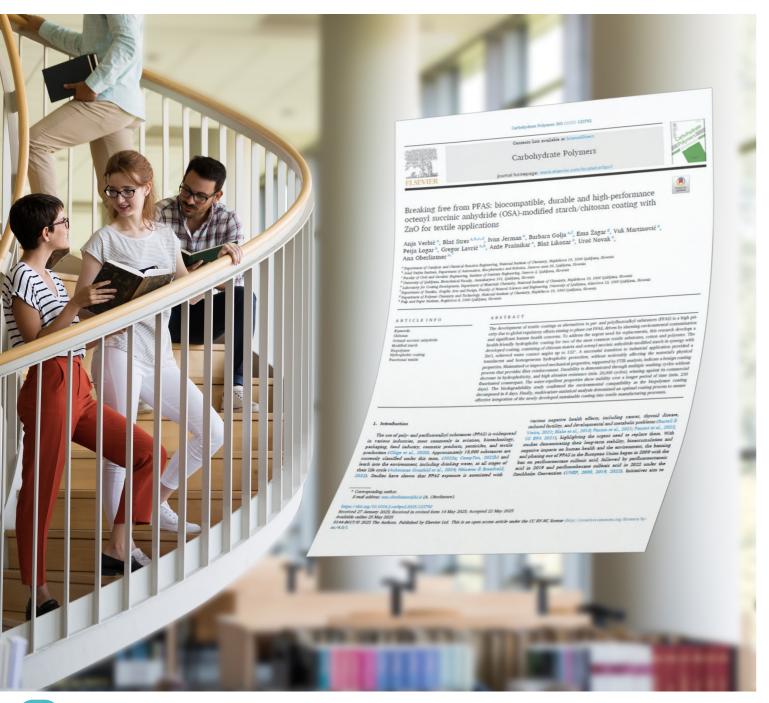




## **NEW PROPLANET PUBLICATION**

We are excited to announce a new publication from the National Institute of Chemistry (NIC) under the PROPLANET Project, marking a significant step forward in sustainable materials research. This study introduces biopolymer-based alternatives for textile coatings that achieve hydrophobic and oleophobic performance, without the use of harmful PFAS compounds.

Find out more: https://www.proplanet-project.eu/wp-content/uploads/2025/06/1-s2.0-S0144861725005752-main.pdf



## **INTERNATIONAL COOPERATION**



Our valued international partner, NSG Group, is actively fostering international cooperation through its participation in the EU-funded PROPLANET project. Collaborating with twelve other partners, NSG Group is contributing to the development of innovative, safe, and sustainable coating materials for glass, textiles, and food packaging. This diverse consortium—comprising end-users, technology providers, and research institutions—exemplifies the power of cross-border collaboration in addressing global environmental and regulatory challenges.

As Verity Piercy, NSG Group's Advanced Technologist, noted, the project bridges critical areas such as environmental protection, safety, and circular value chains. With Su Varma, NSG's Academic Director, providing scientific leadership, the company continues to drive forward-thinking R&D that aligns with both sustainability goals and evolving EU regulations. NSG Group's commitment to shared innovation is a testament to the strength and impact of international partnerships.

Find out their social media post here, where the page has 57k followers: https://www.linkedin.com/feed/update/urn:li:activity:7313177936822452224/





## **PROPLANET BLOG ARTICLES**

We are happy to share our latest blog article on the PROPLANET Project website: "Innovative Biopolymer Coatings: Enhancing Textile Sustainability." Discover how advanced biopolymer technologies are transforming the textile industry by offering eco-friendly, PFAS-free alternatives that improve fabric performance while reducing environmental impact. Dive into the benefits, applications, and future potential of these sustainable solutions.

Find out more: <a href="https://www.proplanet-project.eu/innovative-biopolymer-coatings-enhancing-textile-sustainability/">https://www.proplanet-project.eu/innovative-biopolymer-coatings-enhancing-textile-sustainability/</a>

# 4th BLOG ARTICLE

Innovative Biopolymer Coatings
Enhancing Textile Sustainability

## STAKEHOLDERS' ENGAGEMENT - 3RD STREAMING EVENT

On April 29<sup>th</sup>, the HOLOSS team hosted the third PROPLANET EU Streaming Event, "Beyond PFAS: Embracing SSbD for a Sustainable Chemical Industry." The event brought together over 60 participants, including scientific experts, regulatory authorities, and industry leaders, for a dynamic exchange of ideas and solutions aimed at advancing sustainability in the chemical sector.

The event featured:

- 6 insightful presentations
- 2 open discussion sessions
- · Interactive Q&As and live polls
- A roundtable discussion that united diverse perspectives on PFAS-free innovation

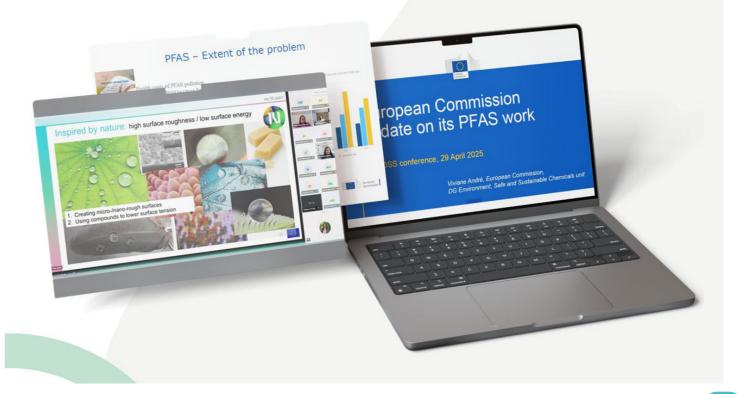
As part of the HOLOSS team, Madeleine, Marcella, and Antonio presented the overarching goals of the PROPLANET Project, emphasising its commitment to Safe and Sustainable by Design (SSbD) principles.

Key contributions included:

- Audun Heggelund (Norwegian Environment Agency) and Vivianne Andre (European Commission, DG Environment), who shared valuable insights into evolving EU regulatory frameworks.
- Anja Verbič from Kemijski inštitut (NIC) and Fabiola Brusciotti from TECNALIA, who showcased groundbreaking research on sustainable coatings.

The event served as a powerful platform for collaboration, innovation, and regulatory clarity—driving actionable change and reinforcing PROPLANET's mission to support a greener, PFAS-free chemical industry.

Find out more: https://lnkd.in/d-zfARCT





## **CLUSTERING ACTIVITIES**

## **UPCOMING ACTIONS**

## **SICT 2025 (23-25 APRIL 2025)**



The PROPLANET Project participated in SICT 2025, held from April 23–25 in Algarve, Portugal, alongside our outstanding cluster partners: BIO-SUSHY, Tornado, and ZeroF. This international event brought together leading minds to explore the future of surfaces and coatings, with a strong emphasis on sustainability and innovation.

As part of the Cluster Workshop on April 23<sup>rd</sup>, PROPLANET contributed two oral presentations that showcased cutting-edge research and development:

- TECNALIA Research & Innovation presented on PFAS-free sol-gel hybrid coatings designed for lowmaintenance glass and food-packaging machinery.
- Kemijski inštitut National Institute of Chemistry (NIC) shared insights into biopolymer-based hydrophobic textile coatings developed within the PROPLANET framework.

These contributions reflect our commitment to Safe and Sustainable by Design (SSbD) principles and our collaborative approach to tackling PFAS-related challenges across industries.

To learn more about our participation and the broader impact of the event, visit: https://www.setcor.org/conferences/sict-2025

On March 19<sup>th</sup>, our partner HOLOSS had the opportunity to present the PROPLANET Project, contributing to meaningful discussions on the challenges faced by PFAS-free initiatives.

With a focus on Safe and Sustainable by Design (SSbD) coatings, the meeting served as a valuable platform to align strategies and engage a wider network of stakeholders.







TECNALIA will be participating in the 20<sup>th</sup> Coatings Science International Conference (CoSI 2025), taking place from June 30<sup>th</sup> to July 3<sup>rd</sup> in the Netherlands. As a key partner in the PROPLANET Project, TECNALIA will present its latest research on PFAS-free, sustainable coating technologies—contributing to the global dialogue on innovation and environmental responsibility in surface science. Find out more: <a href="https://coatings-science.com">https://coatings-science.com</a>



The PROPLANET Project will be represented by AITEX and NIC (Kemijski inštitut) at 2025 ECOSYSTEX major event, continuing to promote PFAS-free and sustainable coating technologies. On November 14, AITEX will participate in the ECOSYSTEX Insight Series #17 (online), sharing insights into innovative textile solutions aligned with Safe and Sustainable by Design (SSbD) principles. Meanwhile, NIC will contribute to upcoming scientific forums, reinforcing PRO-

PLANET's commitment to advancing green chemistry and sustainable materials. Learn more about ECOSYSTEX at: https://www.ecosystex.eu

The PROPLANET Project will be represented at the Reepack Annual Sales Meeting, taking place in October/November 2025 in Seriate (BG), Italy. Hosted by REEPACK Srl, a leader in food packaging technologies—including vacuum chamber, tray sealing, thermoforming, and flow wrap systems—the event offers a valuable opportunity to highlight PROPLANET's PFAS-free



innovations and sustainable coating solutions tailored for the food packaging sector. This engagement reinforces our commitment to industry collaboration and the practical application of Safe and Sustainable by Design (SSbD) principles.

Find out more: https://www.reepack.com

## **PROPLANET'S FUN CORNER**

### **PUZZLE 1: WORD SCRAMBLE**

Unscramble the following letters to find the core concept of PROPLANET:

1. LSPYOERM	
2. FHPODIBROYH	
3 SGNCOAINT	

## **PUZZLE 2: FIND THE WORDS**

Can you find the following words?

**PFAS** 

**Coatings** 

SSBD

**Circularity** 

Sustainability

**Textiles** 

Glass

**Packaging** 

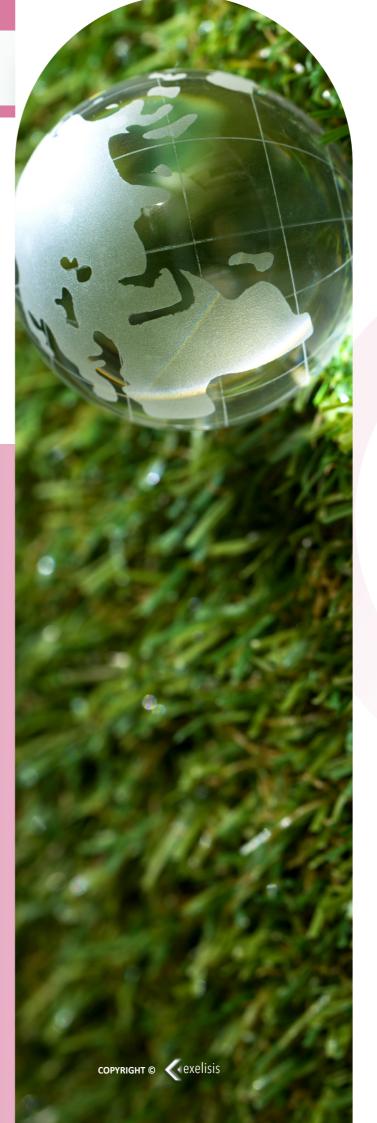
Hydrophobic

Hydrophilic

**Innovation** 

**Biobased** 

ZKUYVWZNBFPYQDJHYDAF G D H B T F T O Y N G G S U G L I E Z O LHCIRCULARITYHWWLWPH AHOCOATINGSILVNFPVYN SYVLPPGJYPPUVURTTPKA SDSUSTAINABILITYRSKW LROKNMQWXNJYAXAKMLMT X O X G S S O Y A G J H D R H C Q A J F V P M O T S J J U Q J V U I Y F F H Q V M H T A O B R Z D N C N V W D R Q D W Z OIAIPDTWBTHTAZREZMJY ULGTXIXKHRQXCYOVRVAB V I R V Z O K R B M M R O A P N S J K S YCAGQQXLRGRQCTHNAYFC YNVGHNOLVNWNOZODDJGM BIOBASEDHRHUNZBPXCKO P A S R C P O W X I J Y R N I X G Y P Z ZESXHFTEXTILESCLDDZB SFFYXAPACKAGINGDPWAA OOBYTSINNOVATIONSBVT





**Enhanced Safe and Sustainable** coatings for supporting the Planet

www.proplanet-project.eu info@proplanet-project.eu

## **#PROPLANET**









## **PROPLANET PARTNERS**

(idener.ai



























Funded by the European Union under the GA no 101091842. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or HADEA. Neither the European Union nor the granting authority can be held responsible for them