

# Beyond the Surface: Tackling the Unseen Challenges of Ecodesign & Energy Labelling Compliance

### **BRUSSELS, 11 DECEMBER 2025**

### **EEPLIANT4** enters its implementation phase

Since its launch in May 2024, <u>EEPLIANT4</u> has brought together 28 organisations from 22 countries in a five-year EU co-funded Concerted Action (May 2024 to April 2029) designed to strengthen Ecodesign and Energy Labelling market surveillance across Europe. The project, coordinated by <u>PROSAFE</u>, is now moving into its execution phase. Over 300 products will be sampled and tested in laboratories, covering eight high-impact product groups — from refrigerators, tyres, and connected devices to electronic displays, vacuum cleaners, and heating systems.

But EEPLIANT4 is more than a pan-European testing campaign. It is also a capacity-building action designed to equip Europe's Market Surveillance Authorities (MSAs) with new skills, modern tools, and stronger collaboration networks. This dual focus — compliance verification and the empowerment of inspectors and enforcement officers — is what makes EEPLIANT4 a key instrument in the EU's toolbox for better application of the applicable rules, supporting the EU single market, and the clean energy transition.







### Home Appliances Under Investigation: Refrigerators, Cooking Appliances & Vacuum Cleaners

Household appliances are essential in everyday life, but they are also among the most energy-intensive products in our homes. Refrigerators consume power 24/7, while ovens, hobs, range hoods, and vacuum cleaners use large amounts of energy during short periods of operation. For this reason, it is crucial that consumers receive accurate information about the true performance and energy consumption of these products when making purchasing decisions.

Market and risk analyses of refrigerating and cooking appliances have shown that most non-conformities detected in previous actions were linked to performance aspects other than their energy consumption. Examples include refrigerators with smaller volumes than declared or insufficient cooling capacity to meet the stated climate class. Incorrectly declared performances result in a misleading, more positive label.

Until recently, cooking appliances were primarily sold through traditional brick-and-mortar retailers. However, MSAs have observed an ever-growing shift towards online sales. EEPLIANT4 will align its activities with these evolving market dynamics, focusing on ovens, hobs, and range hoods – product groups already showing relatively high non-compliance rates in national market surveillance campaigns and under the EU-funded ENERTP testing campaign. In total, around 100 will product models undergo compliance verification testing.

Inspections of household refrigerators have already begun and will lead to laboratory testing of around 24 appliances across two inspection rounds. For cooking appliances, the market and risk analysis will be completed by the end of 2025, with inspections laboratory testing of around 100 appliances planned for 2026.

Vacuum cleaners are also under investigation. With the new Ecodesign and Energy Labelling Regulations still pending, inspections will be carried out under Regulation 666/2013, covering mains-operated and hybrid models. MSAs from eight countries have initiated market research, with 120 product screenings, documentation checks, and laboratory tests on 35 selected vacuum cleaner models planned for late 2026. The activity aims to provide policy input to the ongoing review of the Ecodesign Regulation and, to the extent possible, also to the

new EU Energy Labelling Regulation for this product category.

## Ensuring Compliance in Europe's Commercial Vehicle Tyre Market

EEPLIANT4 is, for the first time in a coordinated EU action, assessing the compliance of commercial vehicle tyres — i.e., Class 2 (C2) tyres for vans and Class 3 (C3) tyres for heavy load vehicles such as trucks and buses. Market analysis indicates that this is mainly a business-to-business (B2B) market, with products sold through fleet or maintenance contracts. This makes it harder for MSAs to check whether the label is actually visible to end users before purchase.

EPREL (European Product Registry for Energy Labelling) analysis also revealed mismatches between the uploaded type-approval test reports and label parameters, suggesting non-compliance — to be verified through inspection.

Testing will focus on rolling resistance, wet grip, and snow performance. Inspections of C2 tyres are underway and will finish in mid-2026, with C3 tyre investigations following in 2027. In total, 30 tyre models, evenly shared between C2 and C3, will be tested, with 5 C2 models also assessed for snow performance.

# Electronic Displays & Connected Devices: Compliance Challenges Ahead

The project has completed its market analysis of computer monitors and signage displays, using EPREL, ICSMS (Information and Communication System for Market Surveillance), and retailer data in order to create a sampling pool across office, gaming, and high-brightness professional displays. Early findings point to incomplete EPREL entries, unclear use of the professional categorisation, and variable reporting of luminance levels. Signage displays, in particular, show wide variation in declared brightness and occasional categorisation issues.

Laboratory tendering has closed, with submitted bids currently under evaluation. The next phase involves documentation checks on 60-70 models, followed by the sampling of 32 products for testing in Q1 2026.

The market review of networked connected products under Regulation (EU) 2023/826 has also revealed significant challenges. Early findings indicate whole industry segments with very low

compliance rates, with many suppliers failing to publicly declare mandatory information, even though the requirements apply since May 2025. Several major manufacturers also appear unaware that their products are subject to this horizontal regulation in addition to product-specific measures.

Upcoming activities include developing awareness-raising materials to inform economic operators of the regulatory requirements and finalising the sampling plan, before moving ahead with the procurement of laboratory services and the testing of around 70 devices in the second half of 2026.

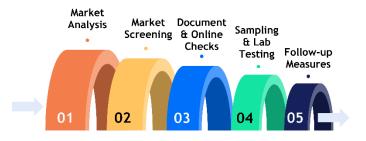
### Heating & Cooling Systems also Under Review

In the solid fuel heater sector, EEPLIANT4's compliance checks are progressing, targeting log burners and pellet stoves. The risk analysis revealed that emissions testing is highly sensitive to product configuration and how the heater is set up, requiring careful handling and possible manufacturer cooperation.

The participating MSAs have screened 109 models, with 53 currently undergoing documentation inspection. Online checks on label compliance across more than 20 web shops are also ongoing. Preliminary results suggest low compliance, prompting the MSAs to engage with retailers to secure corrective measures. Testing is set to begin in the second half of 2026.

EEPLIANT4 also targets commercial refrigerators with direct sales function, such as beverage coolers, gelato scooping cabinets, vending machines, supermarket cabinets, and ice-cream freezers. Unlike household refrigeration, this market is characterised by distinct manufacturers, distribution channels, and extensive product customisation. EPREL reflects the scale of this diversity, listing more than 350,000 models of supermarket cabinets. Inspections are underway and will lead to the testing of 12 appliances across two compliance verification rounds, beginning in January 2026.

Looking ahead, EEPLIANT4 will also address air heating and cooling products. Inspections will be carried out under the existing Regulation (EU) 2016/2281, covering certain types of air conditioners, central heating systems, chillers, and high-temperature process chillers. Work in this sector will start in January 2026.



### Building Capacity: Tackling Emerging Challenges, MSA Training, Customs Cooperation & Developing Digital Tools

EEPLIANT4 goes beyond testing products — it is also about reinforcing the EU's market surveillance system itself. Insights from several MSA surveys and real-life experience have highlighted both recurring and new market surveillance challenges. MSAs continue to face difficulties in accessing large and complex products, ensuring representative product selection to avoid "golden samples", and verifying technical documentation. Emerging issues include traceability and identification of economic operators, interpretation of test reports and type-approval tests, cooperation with laboratories, and broader questions such as determining the date of placing products on the market and verifying resource efficiency and circular requirements.

The Market Surveillance Regulation (EU) 2019/1020 sets a risk-based framework for product selection. To complement this framework and strengthen market surveillance practice, EEPLIANT4 has developed and made available a (semi-)random sampling methodology, supported by a preliminary cost analysis. The project recommends that the European Commission takes this forward through dedicated pilot projects.

Alongside this work, joint training programmes are being designed as study visits to equip MSA officials with new skills and practical experience, covering customs cooperation, e-commerce checks, product testing, use of the ICSMS, and guidance on the ESPR (Ecodesign for Sustainable Products Regulation). Trainings will be hosted by the Netherlands, Ireland, Poland, and Sweden. MSAs not participating in EEPLIANT4 are welcome to join these trainings at their own expense. The first training materials are expected in the second half of 2026.

Furthermore, as part of this workstream, a new content structure is being developed to support the revision of <a href="https://example.com/the-example.com/th

<u>Guideline</u>, using inputs from all EEPLIANT4 capacity-building activities and external sources, including the European Commission and the EU Product Compliance Network (EUPCN).

An MSA-Customs cooperation pilot is also in preparation. Scheduled for 2027, this pilot will build on the EEPLIANT3 experience and test two cooperation models on one or more EEPLIANT4 product groups. The goal is to improve the effectiveness of joint controls and prevent non-compliant products from entering the EU market and reaching consumers.

Finally, EEPLIANT4 will continue the development of digital tools including the WebCrawler prototype initiated in EEPLIANT3, providing solutions to support the daily work of MSAs. These innovations are expected to further modernise market surveillance practices and boost efficiency.

# First EEPLIANT4 All-Hands Meeting & Stakeholder Focus Groups

On 13 November 2025, partners and stakeholders gathered in Brussels for the first EEPLIANT4 plenary/all-hands meeting. The meeting reviewed progress and findings to date across all project activities and highlighted cross-cutting themes.

Two interactive sessions added depth to the discussions. An MSA workshop explored key themes and practical challenges in ecodesign and energy labelling market surveillance:

- Cooperation between MSAs and test laboratories, procurement, and testing;
- Dealing with unclear product legislation and standards:
- Identification of and communication with economic operators;
- Use of data from EPREL and ICSMS;
- Online sales and customs approach.

This was followed by three stakeholder focus groups, offering industry and external partners the chance to share perspectives and discuss challenges and opportunities for improving collaboration with MSAs.

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**EEPLIANT4** First All-Hands Meeting



