

## WHAT IS AN OPEN INNOVATION TEST BED ?

An Open Innovation Test Bed (OITB) is a set of entities providing common access to physical facilities, capabilities and services required for the development, testing and upscaling of nanotechnology and advanced materials in industrial environments. The objective of the OITB is to bring nanotechnologies and advanced materials within the reach of companies and users in order to advance from validation in a laboratory to prototypes in industrial environments.

This ecosystem shall provide users an easy access to holistic innovation boosting services through a Single Entry Point company. Through this company, the customer can gain access to services from partners in more than 10 different EU countries in either its native language or English. Integrating services to a complete offer will substantially reduce the time and cost to progress from an idea to a successful product.

### PROJECT WORKPLAN

**2024:** Sustainable FlexFunction2Sustain OITB Operation

**Jul 2022 and Jan 2023:** Open Calls Cut-off dates for pre-commercial pilot projects

**Oct 2022:** Pilot lines upgraded for biodegradable plastics and increased productivity and reliability

**Mid-2022:** OITB Association created and ready to accept new members;  
Single Entry Point Company operational

**2021:** OITB Member Pilot Facilities accessible for Customer(direct contracts)

## PARTNERSHIP



### AMIRÉS

FlexFunction2Sustain will establish an Open Innovation Test Bed (OITB) for nano-functionalised flexible plastic and paper surfaces and membranes. Such an OITB will support innovative SMEs and industries by drastically reducing time and effort for proceeding through the innovation chain from a product idea to market success. The OITB will provide holistic technical and business services including material and process design, development, upscaling, pilot production, application verification and access to networks, finance, markets and clients.

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[WWW.FLEXFUNCTION2SUSTAIN.EU](http://WWW.FLEXFUNCTION2SUSTAIN.EU)



### OPEN INNOVATION ECOSYSTEM

### SUSTAINABLE

### NANO-FUNCTIONALIZED

### PLASTIC & PAPER

### SURFACES & MEMBRANES

Application Areas

SUSTAINABLE SMART PACKAGING

PLASTIC AND PAPER ELECTRONICS

SURFACES AND MEMBRANES IN BIO APPLICATION

OPTICAL FILMS FOR SECURITY AND DESIGN



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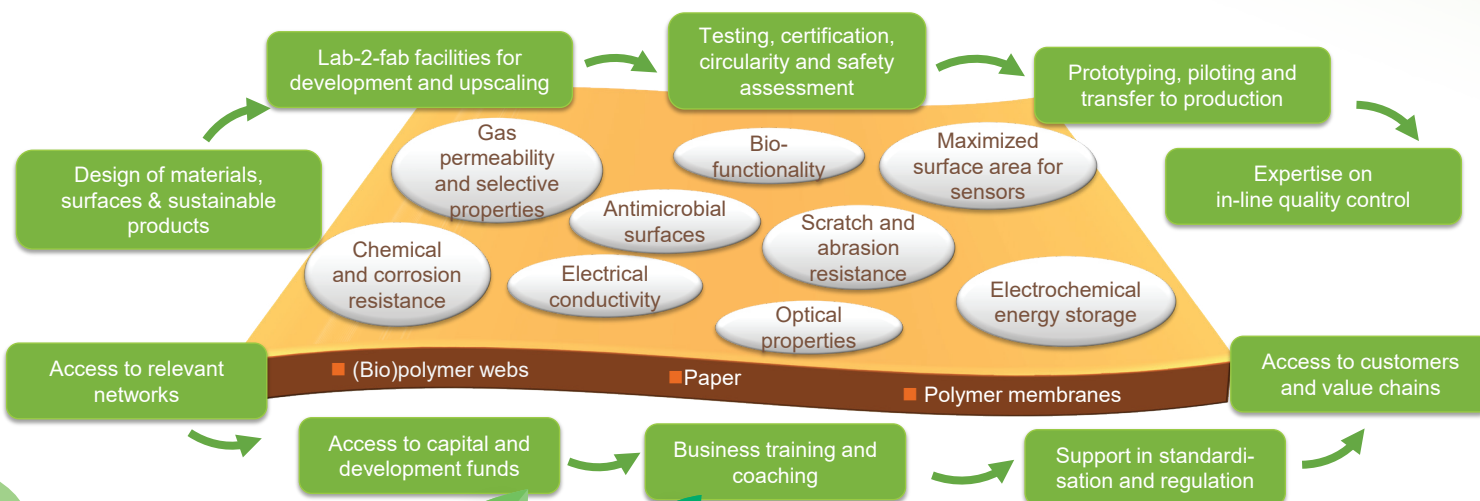
## UPGRADE OF TECHNICAL FACILITIES

FlexFunction2Sustain will upgrade its facilities to provide access to each individual nanosurface /membrane processing technique at all four relevant TRL (4-7) levels. This allows us to offer services for advancing new surface and membrane functionalities from laboratory validation (TRL4) to validation in an operational/ industrial environment (TRL7).



# FLEX FUNCTION 2 SUSTAIN

The FlexFunction2Sustain project aims at creating an Open Innovation Test Bed for nano-functionalisation technologies that enable sustainable and smart plastics and paper based products. The ecosystem will support innovative SMEs and industries by drastically reducing the time-to-market for novel concepts, ideas and products.



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## INDUSTRIAL VALIDATION

- Relevant industrial use cases will validate and demonstrate the performance of the novel nano-functionalised plastic, paper and membrane surfaces and processes:
- Marine-degradable shampoo sachets
- Paper-based fresh food packaging
- Biodegradable security label
- Recyclable mono-polymer drink pouches
- Innovative plastic surfaces in cars
- Selective and switchable water filter membranes

## PRE-COMMERCIAL BUSINESS CASES

FlexFunction2Sustain launched an open call to invite small and medium enterprises (SME) and start-ups for pre-commercial pilot case projects. The selected applicants will receive subsidized access to the innovation services of the FlexFunction2Sustain OITB to support and accelerate development of novel products and technologies for smart and sustainable plastics and paper solutions. The next cut-off dates for application are: 29th July 2022, and 27th January 2023.

Detailed information: [www.flexfunction2sustain.eu](http://www.flexfunction2sustain.eu)

The FlexFunction2Sustain OITB will create a holistic integrated **service portfolio** to support its customers in material and product design, in process and product development, in product verification and certification, with pilot and small series production services and with accessing new markets and business opportunities.