



Digital twins, AI, and robotics: Expo FoodTech 2025 explores the technologies transforming food production facilities

Leaders from Eurecat, Tecnalia, Beckhoff, INTECH3D, Gradhoc and UMYNO Solutions have shared innovative success stories that are transforming the entire value chain of the agri-food industry

From May 13 to 15, Expo FoodTech 2025 will showcase the latest advances in technology applied to the food industry to more than 8,000 professionals

Bilbao, May 14, 2025 – From vineyard automation to industrial levitation systems without physical contact, smart ordering, or digital twins to reduce energy consumption; technology applied to the agri-food sector is advancing by leaps and bounds. This has been made clear on the first day of <u>Food 4 Future - Expo FoodTech</u> and <u>Pick&Pack for Food Industry 2025</u>, which showcased top-level experiences in automation, robotics, 3D printing and the application of AI to optimize the processes of the entire agri-food value chain.

Urko Esnaola, Head of the Flexible Robotics Platform at **Tecnalia**, presented the set of technologies in which the technology center is immersed, ranging from robotic arms with sensors in the fields, automation of vineyards, to solutions that allow food to be prepared and served to the consumer by voice, without screens or keyboards. Technologies that facilitate processes at all levels: in the field, in the factory, or in distribution itself. "We are at a time when robotics can bring a lot to the food industry, but we are working to make the technology more democratic", he said.

Automation is making a very positive and significant contribution to the industry, as recognized by **Luis Manuel Martínez**, Food & Beverage Market Specialist at **Beckhoff Automation**. The expert explained the benefits of the XPlanar system, a levitation technology developed by the company that eliminates mechanical contact in industrial processes, reducing wear and energy consumption, and providing greater flexibility to the processes. During the presentation, Martínez advocated the application of technology for the progress of the industry, for which "today it is necessary to connect all innovations, and this connection provides collaboration between different fields and also communicates".

Likewise, **Óscar Palacín**, Robotics Researcher at **Eurecat**, highlighted the robotization of the countryside as a necessity in the face of the challenges of climate change, rural depopulation and aging. From the technology center they are supervising and supporting new sensor, mapping, analysis and transport projects to apply them to the reality of the industry. "We have a lot of developed technology and a lot of knowledge. Therefore, the value in food production is to apply this in the product process. At this point we are applying the knowledge and technology in the field", he said.

For his part, **John Amin**, CEO of **INTECH3D**, stressed the important role of additive manufacturing as an accelerator of innovation in the industry. Thanks to 3D, it is possible to reduce times, improve designs, optimize performance and the improvement of parts, facilitating





machine maintenance. "The momentum of the technology is really high. We are not yet squeezing technology as we should, because we have too many and people are in short supply. Once we have really understood and internalized what digitalization is, then we will be able to optimize all processes and squeeze the best out of technology", he said.

From the farm to the algorithm: AI is the most present future

One of the most analyzed technologies on the first day of the event has been AI, due to its potential to optimize productivity, reduce waste, improve decision-making and facilitate predictive maintenance in all segments of the industry, from logistics to food production and animal performance. To apply AI optimally, as expressed by **Pol Torres**, Head of AI Energy&Food Research Line at **Eurecat**, "it is essential that companies start collecting data. And, in doing so, it is very important to develop standards on how to carry out that collection".

A value, that of data collection, that **Julen Plazaola**, Energy Efficiency Technician at **Gradhoc Smart**, also wanted to highlight, detailing the advantages offered by AI to make energy consumption more efficient. This is achieved by combining this technology with digital twin solutions, IoT and machine learning, something that they do from his company. "In a supermarket in Barcelona we achieved a 35% reduction in energy consumption. AI not only improves processes, it also boosts sustainability", said Plazaola.

Finally, **Christian Klein**, CEO of **UMYNO Solutions**, presented a platform that accelerates product development by predicting consumer trends and preferences. "The key is to eliminate dependence on Excel and give way to an 'autopilot' that connects the ERP with the reality of the market", he explained. He also wanted to send a message to the entire industry: "The biggest challenge is doubt on the part of the industry. There are still barriers and this could translate into a digital divide in the future. Don't hesitate: start small and overcome the reluctance to take the plunge."

About Food 4 Future — Expo FoodTech (May 13th-15th, 2025, BEC-Bilbao, Spain): is the innovation event for professionals from the entire food industry value chain. For three days, Food 4 Future - Expo FoodTech will bring together, at Bilbao Exhibition Centre (BEC), more than 8,000 food industry professionals and 250 exhibiting firms to present the latest solutions in foodtech, robotics and automation, processing and packaging machinery for the different segments of the food industry, as well as food safety and food science. In addition, it will host the Food 4 Future World Summit, the largest European congress in which to discover the latest trends, success stories and tools to transform the food and beverage industry from more than 450 international experts. Food 4 Future - Expo FoodTech is organized by NEBEXT and AZTI. This year, Food 4 Future - Expo FoodTech 2025 will be held simultaneously with Pick&Pack for Food Industry, the only event in Spain specialized in packaging and logistics solutions for the food industry.

About Pick&Pack for Food Industry (May 13-15, 2025 | Bilbao Exhibition Centre): is an event organized by NEBEXT, a company specialized in professional events focused on innovation and technology transfer, such as HIP, Digital Enterprise Show, Rebuild, Tourism Innovation Summit or Advanced Factories. Pick&Pack is a boutique innovation event for industrial leaders and SMEs in the food industry looking for solutions in logistics, intralogistics and packaging. As part of the summit, the Packaging & Logistics 4.0 Congress, dedicated to packaging, will be held. Pick & Pack 2025 will be held simultaneously with Food 4 Future - Expo FoodTech, the international innovation event for the food and beverage industry.