

Sustainable Agriculture (18)

<u>Carbominer</u> (Ukraine) is a hardware startup that develops an innovative technology to capture CO_2 from the ambient air. Carbominer's technology relies on a mix of dry and wet CO_2 capture approaches, using ion-exchange sorbent on the capture stage and electrochemistry-based regeneration on the CO_2 release stage.

<u>Carbone Farmers</u> (France) develops a platform that enables stakeholders to valorize their contribution to the farmer's transition to low carbon agriculture practices.

<u>Climate Farmers</u> (Germany): Through the transition work with farmers Climate Farmers is enabling unparalleled data availability by using emerging monitoring, reporting and verification (MRV) technologies such as algorithmic models, remote sensing, machine learning, spectroscopy, bioacoustics, and in-field sensors.

<u>CLSTRLobe</u> (Croatia) uses data science, machine learning and advanced mathematics on actual field data to create prediction, optimization, and simulation models. These models provide insights that can support farmers' decisions and are available for farmers to use within the CLSTRLobe's platform.

<u>Deep Crop Growbotics - Capture Automation Limited</u> (United Kingdom) has developed a prototype in the scope of the following feasibility trial: Self-propelled drive unit (4W drive and steer); Machine learning based 3D camera system to locate and grade broccoli and 3-axis robot with cutting end effector.

<u>Economad Solutions</u> (United Kingdom): BioNomad[™] is an innovative, modular and scalable wasteto-energy platform that can be easily installed in small livestock farms, micro-dairies, petting zoos, animal sanctuaries or anywhere where manure or slurry is regularly collected.

<u>EOD Europe</u> (Finland) develops and sells technologies that offer chemical-free microbial control in environments with different requirements for the levels of hygiene.







<u>FarmLabs</u> (Turkey), whose main field of work is to develop smart agriculture technologies, was established to produce hardware and software solutions that plan to reach Turkish and foreign markets in line with its 10 years of experience on artificial intelligence supported variable rate applications in agricultural production.

<u>Fauna Smart Technologies</u> (Denmark) is creating a Plant Immunity Tracker - a real-time tool in farmers' hands for measuring plant immunity.

<u>Lab4Impact</u> (Spain) has developed a robot that automates the recognition and selective removal of weeds using DeepTech technologies: AI, Machile Learning, IoT and RF.

<u>Meshek76</u> (Israel) is developing an AI-based robotic solution, that will monitor the growing process 24/7, and based on CV & AI will conduct accurate dilutions and picking to optimize the process.

<u>Microbe Plus</u> (Poland): By combining biological products and molecular biology, Microbe Plus developed an innovative, microbiological technology (probiotic for plants) that reduces the use of chemical pesticides and fertilizers.

<u>Regrowth</u> (Italy): LEAF (Live Environmental & Animal Feedback) is an integrated product consisting of management protocols, supported by a modular PLF (Precision Livestock Farming) system. The management protocols are based on a software platform that incorporates a series of formulas key for the construction of a farming plan.

<u>Rize ag</u> (France) is a platform where farmers can understand their carbon footprint, define their climate action plan and finance their climate action. This platform is based on an advanced carbon monitoring infrastructure at the farm level combining technologies such as carbon footprint calculation, advanced soil modelling, or even satellite imagery.

<u>SAM-DIMENSION</u> (Germany) uses aerial imagery to create high-resolution application maps for precise, environmentally friendly and cost-saving crop protection.

<u>SmartCloudFarming</u> (Germany) develops a regenerative agriculture indicator based on soil organic carbon assessment. The indicator uses satellite images as input and advanced AI, therefore it is available anywhere and anytime.







<u>Toopi Organics</u> (France) valorizes human urine - a natural fertilizer rich in nitrogen, phosphorus and potassium - by developing a solution for its collection, transformation and valorization in agricultural biosolutions.

<u>ULLMANNA</u> (Czech Republic) developed a robotic intra row non chemical weeding machine which is using machine vision and artificial intelligence to precisely control the weed.

Alternative Proteins (16)

<u>Bosque Foods</u> (Germany) is leveraging the power of fungi to create better-than-meat whole-cut products. Bosque Foods' unique process allows them to cultivate pure mycelium and use it as main ingredient for their whole-cut meat alternatives.

<u>Bright Biotech</u> (United Kingdom) has developed a game-changing innovative technology which uses chloroplasts to express high amounts of high-value proteins in plants. Chloroplast expression is light-driven making it sustainable and is animal- and microbial-free.

<u>Cano-ela</u> (The Netherlands) has a newly developed process that enables to gentle fractionate oilrich seeds into 3 innovative ingredients. These ingredients are not only more sustainable and healthier than the current alternatives, but they can also aid food companies to remove between 3 to 5 other ingredients from their current formulation.

<u>Fabumin</u> (Israel) is developing an innovative and sustainable raw material that is a substitute for egg protein.

<u>Gavan Technologies</u> (Israel) 's proprietary technology extracts high purity proteins from the source while maintaining their physical structure unharmed and preserving their high functionality.

<u>Innomy</u> (Spain) created a platform of finished products fungi-based meat that replicates the experience of eating meat in a natural and healthy way with the benefits of the fungi kingdom.

<u>Koralo</u> (Germany) is developing a patent-pending co-fermentation technology that is unique as it mimics nature. Koralo combines microalgae as a raw material for a traditional fermentation leading directly to a fish alternative raw product without further major processing needs.







<u>LibreFoods</u> (Spain) is leveraging the entire fungi organism to get as close to meat in taste and texture. LibreFoods is taking advantage of the umami taste and aroma of the fruiting bodies, and the unique, fibrous texture that the root system or mycelium offers.

<u>MEALA</u> (Israel) is revolutionizing the plant-based protein industry by developing innovative ingredients and processes that allow the creation of cleaner, healthier, and tastier products with a better ecological footprint. MEALA has developed a proprietary technology that uses natural processes to create the meaty texture and juiciness mimicking the animal-based origin.

<u>MicroHarvest</u> (Germany) is a biotech company on a mission to provide better, healthier, and tastier protein, produced sustainably using the power of microorganisms. MicroHarvest's proprietary technology enables using bacteria to produce protein in a much faster way than existing approaches. The single cell protein and its derivatives are highly nutritious and can be used along the whole protein value chain - ranging from animal feed to direct application in food and pet food.

<u>mk2</u> <u>Biotechnologies</u> (Germany) developed a ground-breaking synthesis platform for the production of high purity peptides and small proteins on large scales and at low cost, respectively for the first time enabling the application of those products in mass applications.

<u>PROTe-IN</u> (Israel) is developing a unique continuous fermentation of nonpathogenic bacteria utilising C02: this industrial technology can be 3 times more efficient than fermentation in batches.

<u>SENNsenn</u> (Austria) developed a plant-based cheese alternative using a process that involves the coagulation of a protein-matrix and a maturation period by lactic acid bacteria. Through this process SENNsenn can establish a creamy texture and an authentic aroma profile without using any thickening agents or artificial flavorings.

<u>Sibö</u> (The Netherlands) is a biotechnology company focused on the development of clean, efficient, and sustainable insect-based bio-active components including protein, fats and chitosan, as highly functional food ingredients for food manufacturers.

<u>The VERY Food Co</u> (France) develops 100% plant-based functional ingredients that can replace eggs and dairy products in cooking and baking applications.







<u>Väcka Quëseria</u> (Spain) is elaborating delicious plant-based cheese respecting the traditional processes of cheesemaking, adding the values and technology of the 21st century. All products are fermented and aged in some cases. Väcka Quëseria is using a special blend of legumes proteins and vegetables to elaborate their cheeses, which makes them not only delicious but more innovative.

Targeted Nutrition (8)

<u>Des Solutio</u> (Portugal) has developed a 100% natural solution that can significantly extend the life span of antioxidants without using artificial preservatives.

<u>Fermentful</u> (Latvia) combines the power of plants and science to produce fermented dairy-free drinks that benefit mental and physical wellbeing, meanwhile doing good to the planet.

<u>Little Inca</u> (United Kingdom) is a smart baby food brand that uses quinoa and other plant-based ingredients in their products. These are scientifically proven to support gut health in babies and infants and improve the gut-brain connection, which is important for normal brain development.

<u>Magic Broth</u> (Lituania) is a 100% natural source of collagen proteins that is rich in nutritional value and easy to include in an everyday diet. It is a 21st-century product that combines an ancient tradition with the possibilities of today's innovation.

<u>Montinutra</u> (Finland) convert forest industry side streams into valuable ingredients for the cosmetics, food & beverage and chemical industries with our scalable technology.

<u>Niskus Biotec</u> (Ireland) has developed bespoke fermentation processes and food grade fungal strains that enable the rapid scalable production of myco-products.

<u>Prevess</u> (Germany) is a digital nutrition platform that provides access to DNA and gut microbiome testing. Then it transfers the results in an app and makes personalized portion sized recommendations at canteens, hotels and restaurants based on latest scientific papers.

Vini Mini (The Netherlands) provides food supplements for babies made from peanuts which offer the easy, healthy and reliable way to prevent food allergies based upon the risk profile of the baby.





Circular Food Systems (10)

<u>Bio2Coat</u> (Spain) has developed an 100% natural edible coating tailored to extend the shelf life of perishable foodstuff, like fruits and vegetables, without changing the organoleptic characteristics of the products.

<u>Biorefic</u> (Latvia) is building the next generation biorefinery that seamlessly plugs into the existing agri-food value chains (e.g. backward integration with oat mills).

<u>Coffe-Eco</u> (Greece) transforms coffee waste to high added-value products.

<u>EcoBean</u> (Poland) is a technology company with a mission to help reduce coffee waste at the scale of business.

<u>Green Spot Technologies</u> (France) has an innovative and zero-waste process, which is circular by design and relies on "nature co-design" millenary technology (fermentation), the side streams (e.g. seeds, pulps, peels, bran, etc) of the food processing industry (soup, cereal, beverage industries) to create affordable functional food ingredients.

<u>GreenTech Innovators</u> (Norway) has developed a pre-treatment method for food waste using biotechnology to improve utilization of carbohydrates and production of a growth media for fermentation to single cell protein and algae to be used as feed in aquaculture.

INSPRO (United Kingdom) uses insects, Black Soldier Fly Larvae (BSFL), to bio convert food waste / by-products into animal feed.

<u>MaGie Creations</u> (The Netherlands) By combining its knowledge of food, food processing and biochemistry MaGie Creations focus to capture the complete value beer grain has to offer us.

<u>Souji</u> (Spain) is a disruptive and unique solution for the recycling and reuse of used vegetable oil.

<u>Traceless materials</u> (Germany) has developed an innovative technology to produce a novel plastic alternative material that is 100% bio-circular and holistically sustainable considering all impact indicators.







Digitalized Traceability (7)

<u>ADVANCED OPTICAL TECHNOLOGIES</u> (Spain) has developed AONIR platform, which has two main components, optical sensors based on near-infrared spectroscopy, and an IoT platform where sensor data is collected, and reports and alarms are generated.

<u>Biocode</u> (Finland) has built an online platform to manage, improve and communicate the climate impacts of food production from individual field plots to end-products at retailers.

<u>Biovaaka</u> (Finland) makes food waste tracking and reduction easy and practical for professional kitchens and restaurants.

<u>Halloid</u> (Austria) offers real-time 3D imaging and measurements of bacteria, algae, yeast, micro plastics, and other particles.

<u>Honey.Al</u> (Spain) has been conceived to offer an easy-to-use system to obtain the microscopic digital images and upload them into the cloud, where our image recognition software analyse the pictures and give a detailed result to the user about specific pollen concentration per area analysed.

<u>Skira</u> (Sweden) developed a platform that enables leading food industry players, on top of their current trading relations and only with a lightweight mill-integration, to start impacting their own commodity supply chain, taking decisions on verified production data, and sourcing their commodities with respect to its level of sustainability.

<u>Vertigo Technologies</u> (The Netherlands) has developed the first microwave-based sensing technique for non-invasive fruit inspection. Vertigo's technology allows to identify all quality attributes associated to quality parameters like ripening stage, shelf life and internal damage.







Sustainable Aquaculture (2)

<u>LISAqua</u> (France) has developed a unique aquacultural process to produce shrimps without antibiotics, without polluting discharge, in land-based indoor aquaculture farms, nearby the consumption areas.

<u>MonitorFish</u> (Germany) offers a digital aquaculture assistant that empowers better decisionmaking to secure the future of fish farming. It guides the fish farmers to achieve their optimal growth strategy while ensuring a healthier fish population with less reliance on chemicals and antibiotics.

