



LIGHT TEASERS OF CIRCULAR BIOECONOMY STARTUPS

STARTUP CODE: CB1

Headline	Biomass for biomedical, cosmetic and agri-food sectors
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	The company is an innovative spin-off currently being accredited at the University of Venice. Inspired by the functions performed in nature, the company enhances biomass for the development of products with high added value for the biomedical, cosmetic and agri-food sectors. Based on technologies that bring to the market within 12-18 months a first line of cosmetic products based on the use of natural polyphenol microcapsules for the controlled release of active ingredients. In the medium term, in addition to the extension of the range of use of the microcapsules, e.g. in nutraceuticals, another line of products is being implemented, i.e. biomedical patches with antimicrobial and anti-inflammatory activity for wound healing and anti-aging treatments. The purpose of the company is the creation of a brand recognized in the local and international panorama for what concerns sustainable and high-tech life-care products.
IP	YES
Investment Needs	75k (seed round)

STARTUP CODE: CB2

Headline	System for the control and interpretation of animal behavior in farms
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	The solution aims to reduce inefficiencies by tracking the animal behavior patterns (eating, water consumption, weight gain / loss). The solution consists of a field station equipped with a variety of sensors that monitor animals in real-time. These operational data enable the farmer to make critical data-based decisions.
IP	YES
Investment Needs	50k EUR

STARTUP CODE: CB3

Headline	The encapsulation process supplier with focus on food industry
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Development
Description	The company dedicated to research and development in the field of encapsulation technologies and is one of the companies characterized by flexibility that, in the field encapsulation, translates into a vast knowledge of different types of technologies: spray dry, bed fluid, ionotropic gelation, emulsion, coacervation.
IP	YES
Investment Needs	500K EUR

STARTUP CODE: CB4

Headline	Beneficial microorganism for crop fertilization
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	The company provides research and services for improving plant growth and plant health to institutes, companies, agricultural consortia and farmers. The company focuses on the identification, characterization and application of harmless and natural bacterial strains to use as plant probiotics as a single strains or part of microbial consortia.
IP	-
Investment Needs	Not yet defined

STARTUP CODE: CB5

Headline	Production of bioplastic, consisting of plant waste and a component deriving from agro-industrial waste
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	The company is making use of agro-industrial waste enabling to obtain a new material characterized by considerable operational flexibility, as it is applicable in various fields, among which that of packaging for agri-food products stands out, guaranteeing the maintenance of the bioclimatic conditions necessary for a quality product. The invention mainly refers to the preparation of a bioformed tile from agricultural waste material such as barley, negative stain, waste material from vine pruning, biodegradable plastic materials with the use of vegetable starches including Corn, potato starch and cultivated mushrooms.
IP	YES
Investment Needs	80k EUR

STARTUP CODE: CB6

Headline	Research and development of naturally derived products that can be used for the packaging, storage and sanitation of fresh food products
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	On market from 2021
Description	The technology recovers waste products from the industrial processes of the agri-food chain, (i.e.: orange peel, apple, tomato, beet pulp) from which they extract biopolymers to produce biodegradable and edible supplements, films, gels, packaging, dehydrated flours (to produce feed or baked goods) and a biodegradable detergent free of toxic components.
IP	YES
Investment Needs	500K EUR in 2021; 2,9 mln EUR in 2022

STARTUP CODE: CB7

Headline	Production of alternative biopolymers to plastic with applications in various sectors, from packaging to automotive.
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	On market
Description	The company is researching and developing sustainable materials benefiting from the qualities of plant-based fibers. These organic fibers are derived from industrial scraps, and are then blended with polymers from recycled, fossil-based or renewable organic sources. The potential application area of the organic fibers and biopolymers: Food and cosmetic packaging, Household products, disposable, pet toys, furniture, industrial automotive.
IP	YES
Investment Needs	1 mln EUR in 2021; 2,5 mln EUR in 2022

STARTUP CODE: CB8

Headline	Bio-based synthetic leather from fruits
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	On market from 2021
Description	The company manufacture, produce and sell bio-based synthetic leather made from orange and cactus. The product is patented internationally. The target markets of synthetic leather are: Automotive, Clothes, Furniture, Footwear, Nautica.
IP	YES
Investment Needs	150K EUR

STARTUP CODE: CB9

Headline	A bio-based tool for managing degraded agricultural soil
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	Combining robotics, wireless devices and biotechnologies in order to measure crop health and functional biodiversity by using DNA sequencing and intelligent computing.
IP	YES
Investment Needs	1,2 mln EUR

STARTUP CODE: CB10

Headline	Biomaterial based solutions for a new precision pest control
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	Prototype
Description	The company produces and sells biomimetic trap against the tiger mosquito. The solution is long-lasting e 100 % green specifically against tiger mosquito. Biomimetics because the gel in the trap (deposition substrate) mimics (pH, salinity, humidity, composition) a site of ideal deposition of the tiger mosquito. This way the trap is selective and more attractiveness than occasional sites and conventional substrates, and is more effective because it captures more eggs (which will never become adults, as they are trapped in the gel)
IP	Pending
Investment Needs	300k EUR

STARTUP CODE: CB11

Headline	Nanovesicles from bio-agriculture for drug-delivery, medicine and dermo-cosmetics
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	On market from 2021
Description	Innovative startup that puts innovation as the central element of its business. Thanks to a highly qualified scientific team and through pioneers worldwide and in the development of this nano-technology, the company aims to revolutionize various areas of the BioTech world due to a highly performing and safe technology compared to those currently on the market. The Nanovesicles (or exosomes) are carriers of molecules essential for life, including proteins, bioactives, lipids and nucleic acids. Unique performances: Resistant to gastric pH; Phospho-lipid membrane; Fusogenic; Natural Bioactives Transporters; Resistant to treatment with chemical lysants; Concentration of Bioactives; immediately bioavailable; They can be loaded with natural and synthetic drugs
IP	YES
Investment Needs	500k EUR

STARTUP CODE: CB12

Headline	Transform waste into a new resource for agriculture
Cluster	Circular Bioeconomy
Business Model	B2B
Development Stage	On market
Description	The company is managing an innovative project of Circular Economy replicable on a large scale intended especially for all farms equipped with a biogas plant with major disposal problem. The digestate produced from animal slurry is used to make a compost which, suitably treated with the patented technology and inoculated with a certified mix of microorganisms, bacteria and mycorrhizae, generates a bio-stimulating granular product with high added value that can be used in floriculture, viticulture, ornamental greenery and organic farming
IP	YES
Investment Needs	Not yet defined