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Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA
MUSA

Mission 4 Component 2 Investment Line 1.5

# THE STARTUPS YOU CAN MATCH WITH ON OCTOBER 29, 2024


MUSA
Regione
Lombardia

# FutureMatch

## CONNECT TODAY, CREATE TOMORROW

On October 29, 2024, Milan will be the epicenter of innovation with **FutureMatch 2024: Connect Today, Create Tomorrow**, an exclusive event – tied to the **0100 Conference** – designed to connect top startups with international investors, paving new paths for entrepreneurial growth and development.

The initiative, hosted in the prestigious spaces of the **Auditorium Testori** and **Sala Biagi** at Lombardy Region, will offer a full day dedicated to innovation, technology, and networking.

**Where Innovation is Born: Startup Pitches**

During the event, the stage of the Auditorium Testori will showcase over 30 startups, each with 5 minutes to present their project. These fast and impactful pitches will provide an overview of the most promising ideas in sectors such as green chemistry, biotech, medtech, deeptech, and cleantech.

This is a unique opportunity for startups to stand out and capture the attention of attending investors. The high-potential technology startups have been selected through the **Start Cup Lombardia** business competition, aimed at supporting research and technological innovation and fostering the creation and development of new high-potential business ventures.

Additionally, startups from the **ESA Business Incubation Centre Milan**, dedicated to the aerospace sector, will also participate. In the afternoon, there will be pitches and the awarding ceremony for the first edition of the **Lombardy Green Chemistry Prize for a Sustainable Future**, organized by Lombardy Region and **Federated Innovation @MIND**, focused on innovation in the chemistry sector.

**SkyDeck Demo Day: A Look Beyond Borders**

The morning will feature the **SkyDeck Demo Day**, an unmissable opportunity to discover the startups part of the **SkyDeck Europe Milan** acceleration program, a result of the strategic collaboration between Lombardy Region and Fondazione Cariplo. This program supports the development of the international acceleration initiative in collaboration with **SkyDeck Berkeley**, one of the top programs from Silicon Valley.

The **SkyDeck Europe Milan** program accompanies selected high-tech startups for six months, offering access to a comprehensive acceleration process, including classroom training sessions, review sessions, technical validation, and technological advisory. The program aims to strengthen their product and service offerings and prepare them for further capital raising from qualified financial operators capable of supporting their growth through equity investments.

The session will begin with a roundtable focused on investors, highlighting the development of deeptech enterprises in Europe. This will be followed by pitches from 9 startups, each given 5 minutes to present their projects. It's a chance to discover companies that have already embarked on an international growth path.

**Matching Sessions: Direct Connections**

The afternoon will conclude with **Matching Sessions**, from 16:00 to 18:00, offering one-to-one meetings between investors and startups. Attendees will also be able to visit the small booths in the **Expo Innovation** area at Palazzo Lombardia, allowing for informal conversations and B2B networking moments. This format is designed to foster direct and focused interaction, creating fertile ground for future collaborations.

**The Organizers**

The event is organized by **Lombardy Region** and **MUSA** (Multilayered Sustainability Action), an innovation ecosystem funded by PNRR funds and including members such as **University of Milan-Bicocca, Politecnico di Milano, Bocconi University**, the University of Milan, and numerous public and private partners.

Join us on October 29 in Milan for a journey into the future of innovation: **Connect Today, Create Tomorrow!**

# FutureMatch Event Program

**CONNECT TODAY, CREATE TOMORROW**

Agenda 24

## October 29, 2024

PALAZZO LOMBARDIA, AUDITORIUM TESTORI
PIAZZA CITTÀ DI LOMBARDIA, MILANO

**9:00 - 9:30** | **Registration and welcome coffee**

**Moderator: Federico Ferrazza,** Director of Wired Italia

**9:30 - 10:00** | **Institutional greetings**

- **Guido Guidesi**, *Regional Minister for Economic Development,* Lombardy Region
- **Salvatore Torrisi**, *Scientific Coordinator,* MUSA Scarl
- **Fiorenza Lipparini**, *General Director,* Milano&Partners

**10:00 - 11:30** | **Startup Presentations I 15 pitches**

- 12 finalists of StartCup Lombardia 2024
- 3 ESA BIC Milano Startups

**11:30 - 13:00** | **5th Demo Day Berkeley SkyDeck Europe, Milan**

**11:30 - 12:00 Roundtable**
*"LPs and GPs: How to Collaborate to Promote European Technology"*
**Moderator: Caroline Winnet,** Berkeley SkyDeck

- **Benno Tieke**, *Director of Portfolio Management*, Philips Ventures
- **Elisa Biava**, *Investment Associate*, HEARTFELT
- **Stephan Rauscher**, *Partner*, Earlybird

**12:00 - 12:15** | **Presentation of Berkeley SkyDeck Europe Milan**

- **Caroline Winnet**, Berkeley SkyDeck
- **Anders Nilsson**, Berkeley SkyDeck Europe, Milan

**12:15 - 13:00 I Startup presentations I 9 pitches**

**13:00 - 14:00** | **Light lunch**

**Moderator: Matteo Scarabelli,** *Chief Communications Officer*, Cariplo Factory

**14:00 - 16:00** | **Green Chemistry Competition "Lombardy for a Sustainable Future 2024"**

**14:00 - 15:10** | **Startup presentations I 13 pitches**

**15:10 - 15:45** | **The Story of Patagonia - Companies Talks**

**15:45 - 16:00** | **Award ceremony for the winners**

**16:00 - 18:00** | **Matching sessions**
Networking between VCs and Startups
PALAZZO LOMBARDIA, SALA BIAGI

MUSA

Regione Lombardia

“The aim of this event is to create opportunities for dialogue and networking between start-ups and investors interested in supporting high-potential projects. We want to give concrete opportunities to young companies that will be able to generate innovation, job and wealth, making an important contribution to Lombardy’s competitiveness on the international market.
I am grateful to all the partners for the work we are doing together to support innovation and the competitiveness of our regional economic system. Lombardy Region will continue to support innovative start-ups and help them grow. We are convinced that they play a key role in the economic growth and innovation of the regional production system and the Country as a whole.
Events like this make us believe even more in our young people and in the innovation ecosystem that, through our universities and incubators, makes it possible to put into practice the partnership between universities and industry, with the aim of making technology accessible to people and designing solutions that can improve our future and that of future generations.”

***Guido Guidesi, Regional Minister for Economic Development, Lombardy Region***

“Once again, MUSA facilitates concrete opportunities for researchers, helping them transform their innovative ideas and research results into successful entrepreneurial ventures. With this goal in mind, FutureMatch was created to support these talents in their growth journey by establishing strategic connections with investors who can sustain and scale their projects. MUSA participates in this initiative, which aims to contribute to the regional entrepreneurial ecosystem by fostering the development of new ideas that can significantly impact at the national and international levels.”

***Salvatore Torrisi, Scientific Coordinator of MUSA***

“We launched SkyDeck Europe in Milan with the aim of reaching a larger number of startups worldwide, and the results speak for themselves: 45 startups supported in just over two years, including significant success stories such as the acquisition of Typeless. At a crucial time for sectors like climate technology and artificial intelligence, it is increasingly difficult to select only 10 companies, as we receive an extremely high number of valid ideas.”

***Caroline Winnett, Executive Director of Berkeley SkyDeck***

“SkyDeck Europe has grown significantly over these two years of activity: more than 4.000 applications from all over the world, 45 startups guided in their growth, 6.5 million euros invested through acceleration tickets. These numbers demonstrate how this program has now become a point of reference for startups across Europe. With SkyDeck Europe, we aim to engage startups capable of competing and attracting investments in the international arena.”

***Anders Nilsson, SkyDeck Europe Program Leader at Cariplo Factory***

“We’re very pleased with the success of the Berkeley SkyDeck Europe Milan acceleration program. Over five editions we’ve seen 45 startups able to grow and innovate in key sectors for industry and society.
At Lendlease, together with UC Berkeley SkyDeck and Cariplo Factory, we are proud that those startups have accelerated thanks to the MIND ecosystem. It’s an environment capable of attracting innovation and talent from all over the world; and where companies contribute to a more sustainable and inclusive future.”

***Andrea Ruckstuhl, Lendlease Group Executive, International***

“The Green Chemistry project – born from the memorandum of understanding between Regione Lombardia and Federated Innovation @MIND – aims to promote the development of innovative solutions in the field of green chemistry, which are essential to enable regional actors to compete globally. Chemistry, observes Fabrizio Grillo, President of Federated Innovation @MIND, is the beating heart of over 95% of the manufacturing sector, constituting an essential component in all industrial sectors. We are proud to be leading such a significant project, which will foster co-innovation processes between major industrial groups in the sector and the innovation ecosystem, involving university spin-offs and startups with high-potential application technologies. This will offer an extraordinary opportunity to access talent, patents, and advanced technologies.”

***Fabrizio Grillo, President of Federated Innovation @MIND***

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## StartCup Lombardia

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# Behavix

## SHORT DESCRIPTION OF THE PROJECT

Behavix combines technology and behavioral economics to engage and educate consumers, preventing food waste in collective catering.

## EXTENDED DESCRIPTION OF THE PROJECT

In a system where leftovers are typically discarded, Behavix combines technology and behavioral economics to engage consumers and prevent food waste in collective catering. Our platform monitors environmental and waste data provided by users, allowing companies to understand the causes and plan preventive interventions. Preventing waste instead of redistributing it aligns supply with actual demand, reducing overproduction and leading to a more efficient, lower-cost supply chain. Users are engaged in the process through gamification and nudging strategies, transforming them into active participants in food waste prevention. Our predictive algorithms analyze signals of change, enabling companies to anticipate consumption trends and adjust menus accordingly. Identifying food waste causes is crucial for catering companies to:

- Mitigate rising costs
- Comply with reporting obligations (CSRD)
- Adhere to the UN's 2030 Agenda, aiming to reduce waste by 50%
- Compete in public tenders.

## NEED ADDRESSED

1 in 2 trays in canteens contains leftovers. In Italy, this amounts to 38,000 tons/year of wasted food, for a lost revenue of €266 million.

## SOLUTION PROPOSED

A SaaS platform to prevent food waste, combining consumption monitoring, feedback, gamification and predictive algorithms.

## TARGET MARKET

Collective catering, which in Europe serves 1/4 of out-of-home meals: a market of over €25 billion with 67 million consumers served daily.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
ICT & Services

**TRL**
4

**PATENT**
No, but I plan to apply for a patent



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# BioFashionTech

## SHORT DESCRIPTION OF THE PROJECT

BioFashionTech transforms mixed fiber textile waste into biobased materials, using a patented enzymatic process for sustainable recycling.

## EXTENDED DESCRIPTION OF THE PROJECT

BioFashionTech is revolutionizing textile waste management by transforming mixed fiber waste into valuable biobased materials like fermentable sugars and recycled plastics. Our patent-pending enzymatic process eliminates harsh chemicals, reduces CO2 emissions, aligns with EU Green Deal goals. Unlike traditional recycling, which requires fiber sorting, our technology processes mixed fibers without separation, simplifying the process and reducing complexity. We also upcycle dyed and contaminated textiles into sustainable materials, cutting water usage and emissions. Our technology was validated through a €35K paid pilot project, and we secured €230K in funding from Dutch and Italian institutions. R&D partnerships with TU Delft, University of Groningen, and Politecnico di Milano further advanced our innovation. Market readiness is demonstrated by collaborations with the Circle Economy Foundation and 10 customer LOIs, positioning us to scale and meet growing demand.

## NEED ADDRESSED

BioFashionTech tackles the inefficient management of textile waste based on mixed and colored fibers.

## SOLUTION PROPOSED

BioFashionTech transforms mixed fiber textile waste into biobased materials like sugars and plastics through a patented enzymatic process.

## TARGET MARKET

BioFashionTech targets the EU's 11.5M tonnes of textile waste, tapping into the growing bioplastics and recycled plastics markets.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
CleanTech & Energy

**TRL**
5

**PATENT**
YES

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# BiosYness

## SHORT DESCRIPTION OF THE PROJECT

We are developing an innovative bio-leather based on recycled coffee grounds and bio-plastics, an eco-sustainable alternative to leather.

## EXTENDED DESCRIPTION OF THE PROJECT

We collect organic waste from coffee roasters throughout the city (Milan and all major European cities) free of charge through a certified service provider. A partner dehumidifies the waste, micronizes it in formulated sizes (to have a functional role, not filler) based on laboratory and pilot testing over the past 4 years. We add customized but economical biothermoplastics with a secret recipe, WITHOUT solvents and plasticizers!
Using an engineered die, extrusion, granule extrusion, pressing and pattern application, everything is done in the Lombardy region by our partners on your order. We do BtoB marketing using our own samples (+200) as we can get a wide variety of products in terms of sizes, colors, requirements mainly in the form of faux leather for furniture, fashion, car manufacturing and accessories. A more sustainable alternative to leather and eco-leather.

## NEED ADDRESSED

Lack of adequate “Supply to demand” for high quality, sustainable and affordable eco-leather to supply producers in ITALY and EU.

## SOLUTION PROPOSED

To design, optimize and implement a supply chain, to formulate and produce sustainable and economical bio eco-leather.

## TARGET MARKET

For the first target we focus on furniture (more reliability less regulation), and then accessories, fashion, car interior.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
CleanTech & Energy

**TRL**
6

**PATENT**
No, but I plan to apply for a patent



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# Clean OS

CleanOS

## SHORT DESCRIPTION OF THE PROJECT

Clean OS: the first full-arch electric toothbrush, custom-fit to your mouth for medical-grade hygiene in just 30 seconds.

## EXTENDED DESCRIPTION OF THE PROJECT

Over 90% of people don't brush their teeth correctly due to human error factors like distraction, lack of education, and incorrect techniques, leading to oral plaque buildup. As a result, poor oral health costs society $710 billion annually. However, proper brushing could prevent 80% of all oral diseases and complications.
Clean OS is the next evolution of oral care. Our toothbrush completely eliminates human error, delivering medical-grade hygiene results in less than 30 seconds at home. We achieve this by tailoring each modular component of our full-arch device to your mouth, guaranteeing complete & consistent brushing coverage of all critical tooth areas.

## NEED ADDRESSED

Effective, effortless, and consistent oral hygiene to prevent or avoid the progression of oral diseases.

## SOLUTION PROPOSED

Clean OS eliminates human error by fully automating brushing, replacing your toothbrush, interdental brushes, and flossing.

## TARGET MARKET

People with gingivitis and periodontitis face challenging oral care routines and high costs for managing these widespread diseasest.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
7

**PATENT**
No, but the patent application has been filed

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# EFESO

## SHORT DESCRIPTION OF THE PROJECT

Shaping the future with innovative deep-tech solutions: we develop sustainable and ultra-low power electronics devices for a greener world.

## EXTENDED DESCRIPTION OF THE PROJECT

By 2040, information technologies are projected to consume over 50% of global energy—an unsustainable trend. The growing demand for computing power requires an increasing number of transistors, yet their miniaturization is approaching unavoidable physical limits, presenting significant challenges for the next generation of electronic devices. Major semiconductor companies are seeking ways to integrate memory and CPU, but the complexity of these components makes implementation difficult.
The EFESO project harnesses innovative materials that combine essential properties within a single semiconductor. It introduces a new generation of ultra-energy-efficient devices, surpassing the constraints of current CMOS transistors. Moreover, the materials used are fully compatible with existing silicon technology, allowing seamless integration into production lines while driving a shift towards smaller, higher-performing chips to address today's energy inefficiency.

## NEED ADDRESSED

Today's rising energy use by electronics is unsustainable. Essential measures are needed for a sustainable and eco-conscious tech future.

## SOLUTION PROPOSED

EFESO presents a paradigm shift with a novel electronic device that enhances energy efficiency by merging logic and memory in one design.

## TARGET MARKET

Our diverse and extensive portfolio focuses on transistors and memories (TAM), edge computing (SAM), and low-power wearable devices (SOM).

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Industrial Technologies

**TRL**
3

**PATENT**
No, but I plan to apply for a patent



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# FAST Aerospace

## SHORT DESCRIPTION OF THE PROJECT

FAST Aerospace develops HyperDart, its new hypersonic air-launcher offering Italy and Europe a new independent and flexible access to space.

## EXTENDED DESCRIPTION OF THE PROJECT

Italian startup FAST Aerospace is developing an innovative proprietary launch system to offer satellite manufacturers from Italy and Europe a new bridge to space, with unique and highly competitive features, crushing the bottleneck currently afflicting the space access sector, particularly relevant for satellites of small to medium size.
This air-launcher, called HyperDart, flies to space up to 250kg of payload, and it is designed to be able to take off from existing airport runways and has a close-to-full reusability architecture, with up to 95% of the dry mass reused for each flight. HyperDart can operate from mainland Europe, offering an independent and reliable direct access to space.
The development of the technologies that compose HyperDart has already started: thanks to an investment of 500,000€ by Cassa Depositi e Prestiti (CDP), FAST has started the design and build of a proprietary ramjet engine prototype, which first ignition on ground is scheduled for the end of 2025.

## NEED ADDRESSED

Space access is affected by a launch capacity bottleneck, a consequence of present-day vertical rockets' drawbacks.

## SOLUTION PROPOSED

HyperDart will curb down European launch costs by 4 times and will allow weekly launches from mainland Europe and from Italian soil.

## TARGET MARKET

The space launch market in the NATO region is capitalized at 8.3B€ in 2032, 22% of which is targeted by FAST, using 5 HyperDarts.

## FUNDING NEEDED

> 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Industrial Technologies

**TRL**
2

**PATENT**
No, but I plan to apply for a patent

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# Glutensens

## SHORT DESCRIPTION OF THE PROJECT

Glutensens guarantees food safety with an innovative device that detects gluten in real time in catering.

## EXTENDED DESCRIPTION OF THE PROJECT

Glutensens has developed an electrochemical device to detect the presence of gluten in real time, mainly aimed at restaurants and the restaurant sector. The mission is to eliminate the risks of gluten contamination, offering a practical and safe solution for celiacs and people with non-celiac gluten sensitivity. The technology is based on a sensor that guarantees fast, accurate and low-cost results, allowing restaurateurs to easily test food after a short training. This device represents a true revolution in food safety, reducing uncertainty and giving consumers the peace of mind to enjoy a worry-free meal outside the home. Glutensens stands out for the effectiveness and speed of its device, with reliable results even in processed foods. In addition to being cost-effective and portable, it can be used directly by restaurateurs to ensure food safety.

## NEED ADDRESSED

Reduction of accidental gluten contamination in restaurants and collective catering and in the food industry.

## SOLUTION PROPOSED

Glutensens offers an innovative certified electrochemical device that detects the presence of gluten in real time in food.

## TARGET MARKET

The initial focus is on restaurants, then on the food industry.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
4

**PATENT**
No, but the patent application has been filed



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# INSIGHT

## SHORT DESCRIPTION OF THE PROJECT

INSIGHT proposes a sensorized endoscopic add-on for AI-powered colonoscopy.

## EXTENDED DESCRIPTION OF THE PROJECT

Colorectal cancer is the third most common malignancy and the second leading cause of cancer-related deaths. The most effective prevention method is colonoscopy. The endoscope is manually operated by the clinician; however, the presence of folds and curves in the tissue, combined with the limited maneuverability of the endoscope, impairs full visualization of the mucosa, leading to a high number of undetected lesions. INSIGHT offers an add-on device with a position sensor mounted at the tip of the endoscope and two artificial intelligence modules. The first aims to perform virtual biopsies of lesions, while the second combines camera images with position and orientation data from the sensor to reconstruct a 3D model of the colon. INSIGHT enhances the diagnostic accuracy of the procedure by reducing the percentage of unvisualized mucosa and missed lesions.

## NEED ADDRESSED

The peculiar colon shape and the reduced maneuverability of the endoscope limit visualization, increasing the risk of undetected lesions.

## SOLUTION PROPOSED

INSIGHT offers an endoscopic add-on with sensors and two AI modules for virtual biopsy and real-time 3D reconstruction of the colon.

## TARGET MARKET

The target market includes hospitals and clinics performing colonoscopy procedures. The market is rapidly growing, with a CAGR of 30%.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
3

**PATENT**
No, but I plan to apply for a patent

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# Leximore

## SHORT DESCRIPTION OF THE PROJECT

Leximore: an immersive and modular therapy game technology for children with and without special needs.

## EXTENDED DESCRIPTION OF THE PROJECT

Leximore (ex. Moovy) is a tool designed for therapists and caregivers of children (4-13 y.o.) with language disorders. These practitioners face demanding workloads, addressing the unique needs of each child.
Leximore aims to support both therapists and patients by providing a simple, engaging, and effective tool to enhance therapy sessions, making the work easier.
Leximore is a board game that facilitates language and cognitive development through quality content by universities, and combining traditional therapy methods with technology. Children complete therapy exercises involving physical objects, while therapists supervise and manage their time more efficiently, focusing on other tasks as needed. Leximore also enables access to new activities, real-time customization, and data collection on patient progress, all through a user-friendly interface.
Our business model follows a B2B Razor and Blades approach, offering a starter kit, activities, subscriptions, and hardware components.

## NEED ADDRESSED

Learning disorders are the most invisible disability worldwide. 15% of kids are enrolled in specific programs with a 6.4B€ impact on NHC.

## SOLUTION PROPOSED

Leximore is an innovative tool for the rehabilitation of learning disorders perceived as an interactive and engaging board game.

## TARGET MARKET

Our target customers are speech therapists as first but also educators, psychologists, and support teachers. SOM:30M€,SAM:216M€,TAM:1.3B€.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
4

**PATENT**
No



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# RoseBio

ROSEBIO
democratizing precision diagnostics

## SHORT DESCRIPTION OF THE PROJECT

RoseBio offers non-invasive, cost-effective precision IVD tests for rare markers, easily integrated into clinical workflows.

## EXTENDED DESCRIPTION OF THE PROJECT

RoseBio is a CNR spin-off, founded in March 2024, aiming to democratize molecular testing and make it a routine part of healthcare. RoseBio offers innovative diagnostic solutions, including instruments, reagents, and in vitro diagnostic (IVD) tests that enable accessible, fast, and non-invasive detection of rare markers. Its patented “Universal DNA encoding/decoding” technology combines sensitivity and flexibility, ideal for targeted genotyping and pathogen variant detection. The ZipArray platform, in advanced validation, is designed for molecular oncology and infectious diseases. RoseBio targets research centers, diagnostic labs, and pharmaceutical companies, optimizing Companion Diagnostics use in clinical trials. The RUO prototype gathers feedback to improve platform usability and efficiency. Future developments include expanding the technology to new medical areas like transplant monitoring, chronic diseases, and reproductive medicine.

## NEED ADDRESSED

Availability of mutation tests essential for selecting suitable patients for drugs, minimizing side effects and costs.

## SOLUTION PROPOSED

IVD reagents and tests enabling cost-effective, non-invasive detection of rare markers in biological samples like plasma, serum, and urine.

## TARGET MARKET

Research centers, diagnostic laboratories, hospitals, and pharmaceutical companies requiring Companion Diagnostics and support in trials.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
7

**PATENT**
YES

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# SMUSH Materials

## SHORT DESCRIPTION OF THE PROJECT

SMUSH Materials leverages mushroom fermentation technologies to transform agri-industrial byproducts into circular and compostable packaging.

## EXTENDED DESCRIPTION OF THE PROJECT

SMUSH Materials produces 100% natural and compostable secondary packaging solutions applicable for heavy (>15kg) or fragile products.
EU directives are banning Single Use Plastics (SUP) by 2030, and there are no solutions yet on the market that can function as styrofoam in terms of dimensional stability, compostability and competitive cost at the same time.
SMUSH transforms organic agricultural byproducts having no economical value into (industrial) packaging solutions with competitive characteristics in terms of mechanical resistance and compostability at the end of life, allowing corporates to meet the new directives by lowering the cost of disposal of their packaging by 80%.

## NEED ADDRESSED

Corporates must adopt new compostable materials for packaging, but the ones on the market are not mechanically performant as styrofoam.

## SOLUTION PROPOSED

SMUSH offers innovative sustainable packaging products depending on the shape and scope of application (void filler, protection, cushioning).

## TARGET MARKET

SOM: EPS packaging consumption in Italy (1 Billion euro - 2030)

## FUNDING NEEDED

> 2.000.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Industrial Technologies

**TRL**
6

**PATENT**
No, but I plan to apply for a patent



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# SoBu

## SHORT DESCRIPTION OF THE PROJECT

SoBu is a startup project offering an app with audio-motor games designed to help blind children connect with others and explore the world.

## EXTENDED DESCRIPTION OF THE PROJECT

Being born with a visual impairment limits a child's ability to explore their surroundings and affects their understanding of their body in relation to the world. This is the reality of 22 million children worldwide, who often face difficulties in movement and social interactions. We set out to create a solution that eliminates the barriers visual impairment can impose on play and social engagement. Our solution is thus SoBu (Sound and Buzz), an innovative app for smartphones and smartwatches featuring interactive games that combine sounds, vibrations, and movement to enhance motor skills and promote socialization. The app enables visually impaired children to engage in group activities and perform everyday tasks, like reaching out to someone or picking up an object. Our approach has already produced promising results in scientific and clinical settings with many visually impaired children worldwide.

## NEED ADDRESSED

There is a lack of interactive games for blind children, leaving them isolated and without stimuli for movement and social interactions.

## SOLUTION PROPOSED

SoBu offers engaging group motor games that enable blind children to interact with individuals of all ages in diverse everyday settings.

## TARGET MARKET

Our initial target will be the families of blind children, whom we will reach through clinical centers and associations.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
StartCup Lombardia (Italy)

**INDUSTRY**
Life Sciences & MedTech

**TRL**
4

**PATENT**
No

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ESA Business Incubation Center Milano

**Capsule Corporation**

**Space2earth**

**SunCubes**

# Capsule Corporation

## SHORT DESCRIPTION OF THE PROJECT

Capsule Corporation develops, manufactures and commercializes an innovative water-based propulsion system for cubesats and smallsats.

## EXTENDED DESCRIPTION OF THE PROJECT

Capsule Corporation is developing and commercializing WaterCube, an innovative water-based propulsion system designed for CubeSats and SmallSats, providing a sustainable, safe, and cost-effective solution for orbital maneuvers. With a growing demand for small satellite constellations and missions, WaterCube addresses critical maneuvering needs such as collision avoidance, de-orbiting, drag compensation, formation flight and attitude control with minimal environmental impact.
It uses demineralized water as propellant, ensuring non-toxicity, low handling costs, and streamlining integration and test operations, making it ideal for rapid deployment missions. WaterCube offers a versatile, compact propulsion unit that combines affordability with customizability according to client needs, perfect for both commercial and institutional space missions. With a focus on sustainability and scalability, WaterCube is disrupting propulsion technology in the rapidly expanding space economy.

## NEED ADDRESSED

Sustainable, efficient, low-cost and short lead time propulsion systems for CubeSats and SmallSats in space missions.

## SOLUTION PROPOSED

WaterCube is a water-based propulsion system, enabling sustainable space propulsion, while providing high performance and efficiency.

## TARGET MARKET

Space industry upstream market: cubesats and smallsats spacecraft integrators and operators.

## FUNDING NEEDED

BETWEEN 500.000 € AND 2.000.000 €

**ORIGIN**
ESA Business Incubation Centre Milan

**INDUSTRY**
SpaceTech

**TRL**
5

**PATENT**
No, but I plan to apply for a patent



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# Space2earth

## SHORT DESCRIPTION OF THE PROJECT

AI-powered platform using satellite data and chatbot to help users maximize environmental monitoring and decision-making.

## EXTENDED DESCRIPTION OF THE PROJECT

Space2earth is an innovative platform that leverages satellite data with AI and a built-in chatbot to help users better understand and utilize this data for sustainable development. Our platform provides access to environmental reports, satellite data, and historical analysis, simplifying the process of interpreting complex information. The AI chatbot serves as a guide, helping users navigate datasets, optimize solutions, and unlock the full potential of satellite information. Services include monitoring atmospheric emissions, vegetation health, precision agriculture, financial risks induced by climate change, and infrastructure stability. Space2earth uses advanced Remote Sensing (RAG) techniques and Machine Learning (ML) models to provide tailored, high-value solutions across various sectors.

## NEED ADDRESSED

The need for easy-to-use tools that help users understand and utilize satellite data for sustainable decision-making.

## SOLUTION PROPOSED

AI-powered platform with chatbot support, offering tailored satellite data services for environmental and economic analysis.

## TARGET MARKET

Sectors like agriculture, energy, finance, and infrastructure seeking accessible satellite data solutions for informed decisions.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
ESA Business Incubation Centre Milan

**INDUSTRY**
SpaceTech

**TRL**
3

**PATENT**
No, but I plan to apply for a patent

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# SunCubes

## SHORT DESCRIPTION OF THE PROJECT

SunCubes is a power beaming startup, capable of recharging small electronic devices wirelessly at 500 m distance.

## EXTENDED DESCRIPTION OF THE PROJECT

SunCubes is a startup founded by 1 PhD in Multi-Body System Dynamics, 3 other space engineers and 1 management engineer from Politecnico di Milano, and it has developed a laser power beaming system, capable of recharging small electronic devices wirelessly at 500 m distance. The mission of the company is to revolutionize the way we transfer energy both on the Earth and in Space. The system to date developed, called SunCubes LUCY, uses a generator that emits a safe laser beam, which is converted into electrical energy by a receiver, which can be mounted on a drone. During the investment round, LUCY will reach a distance of 1 km using a patented shut-off and automatic pointing system, transmitting 100W of electrical power to a drone. The vertical chosen for the application of the technology is the drone market, because these have restricted time of flight due to the battery's endurance, which poses several limits to the diffusion of the drone technology.

## NEED ADDRESSED

Currently, drones can only fly for few minutes due to battery limitations, requiring them to make battery swaps by an operator.

## SOLUTION PROPOSED

The system consists of a generator that wirelessly transmits energy via laser to a receiver embedded in a drone.

## TARGET MARKET

SunCubes is targeting the European drone market, valued at €1 billion, with a focus on monitoring companies that utilize drones.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
ESA Business Incubation Centre Milan

**INDUSTRY**
SpaceTech

**TRL**
4

**PATENT**
Yes



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## Berkeley SkyDeck Europe, Milano

**CloEE**
**Daspren**
**Drill Surgeries Ltd.**
**DT Master Carbon**
**Flux Robotics**
**.omics**
**OpenGrant**
**SOULA**
**Trag**

# CloEE

## SHORT DESCRIPTION OF THE PROJECT

AI digital advisor for continuous improvement, energy consumption reduction, improved quality, and sustainability of millions manufacturers.

## EXTENDED DESCRIPTION OF THE PROJECT

CloEE is an AI Digital Advisor designed to enhance the productivity of discrete manufacturing companies. CloEE focuses on real-time data collection, reducing emergency stops by up to 95% and improving productivity, reducing reject rates by two times and improving equipment efficiency by up to 30%. The CloEE AI Digital Advisor provides continuous improvement suggestions, predicts, and helps optimize operation modes that lead to substantial cost savings on equipment expenses. Drawing on the data collected, CloEE presents the possibilities of generative AI, paving the way for advanced technology management. CloEE aims to reduce carbon emissions by improving OEE, decreasing downtimes and energy waste, and minimizing manufacturing machines worldwide.

## NEED ADDRESSED

An average manufacture face 30% of downtime of equipment. 40% of losses comes from the lack of data analysis of equipment performance.

## SOLUTION PROPOSED

AI driven analytics platform that constantly monitors manufacturing processes and offers insights and recommendations to improve operations.

## TARGET MARKET

10 million Industrial mid-sized factories with revenues ranging from $5 million to $500 million in the EU, USA, and APAC.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Industrial Technologies

**TRL**
8

**PATENT**
No, but I plan to apply for a patent



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# Daspren

BSE

## SHORT DESCRIPTION OF THE PROJECT

Daspren is a cybersecurity platform that uses patented AI technology to allow companies to take control of their data.

## EXTENDED DESCRIPTION OF THE PROJECT

Daspren is a cybersecurity platform that uses patented AI technology that learns and understands user-specific data-centric patterns and behavior to create a custom algorithm for unparalleled protection.
Being user-specific, Daspren evolves into a different custom cybersecurity solution for each user, rather than a generic one for all. This offers users levels of data protection far greater than any other prevention and protection platform in the world.

## NEED ADDRESSED

Data is the primary target of cyber-attacks. It can be stolen, locked by ransomware or destroyed by wipers.

## SOLUTION PROPOSED

The solution intercepts all data accesses in real time.
Thanks to its AI, it can distinguish legitimate accesses & block non-legitimate ones.

## TARGET MARKET

Companies with sensitive data are our target customers (as local authorities, industry, finance), with healthcare being an initial focus.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Cybersecurity

**TRL**
8

**PATENT**
Yes

BACK TO INDEX

# Drill Surgeries Ltd.

## SHORT DESCRIPTION OF THE PROJECT

The next era in surgical navigation systems.

## EXTENDED DESCRIPTION OF THE PROJECT

Drill Surgeries has created the first Artificial Intelligence platform to navigate doctors operating on long-bone fractures without X-rays, in 83% less time and saving over €2,000 per operation.
Drill Surgeries' technology runs on any Mixed Reality headset and guides doctors through a variety of procedures, making it the first UNIVERSAL guidance system, recording instant buy-in from doctors thanks to its >96% accuracy and short learning curve.
Currently LIVE in 1 hospital, dozens of patients operated and 3 more hospitals committed.
This is a medical device Class 1 and is ready to enter the market today with the support from dozens of international doctors:
– "Drill Surgeries technology is a paradigm shift!"
– "It feels like magic"
– "Drill Surgeries eliminates the fear every doctor experiences before an operation"
– "This is the guidance solution we have been waiting for decades".

## NEED ADDRESSED

20 million long-bone fractures are treated using X-rays and guesswork. It takes 2 hours of radiation, blood loss, infections, trauma...

## SOLUTION PROPOSED

Our AI and proprietary databases build 3D holograms to navigate the doctor to the exact spot without X-rays, guesswork or risks 6.2x faster.

## TARGET MARKET

We leverage a bottom-up approach to create an initial but scalable target market of €5 Billion (20M patients a year * €250 licensing fee).

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Life Sciences & MedTech

**TRL**
9

**PATENT**
Yes



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# DT Master Carbon

DT MASTER Carbon

BSE

## SHORT DESCRIPTION OF THE PROJECT

We unite corporations and sustainability project owners to promote a future that values carbon reduction and biodiversity conservation.

## EXTENDED DESCRIPTION OF THE PROJECT

We have developed two innovative AI-driven products:
1. *Biodiversity and Climate Databases*: These generative AI-powered databases monitor and measure biodiversity and climate indicators, tracking footprints and dependencies across suppliers, commodities, investments, mortgages, and more. They provide insights for mitigation strategies, transitional and physical risk analyses, and offer tailored biodiversity and climate actions.
2. *Biodiversity and Climate Marketplace*: Powered by MRV technology, this marketplace uses computer vision AI, deep learning, satellite imagery, and on-field chemical and physical indicators to deliver carbon sequestration and biodiversity reports. Within the marketplace, it enables companies to co-design, or invest in biodiversity and climate projects both within and beyond their value chains, in partnership with project developers or solution providers.

## NEED ADDRESSED

We two of humanity's most critical environmental challenges climate change and biodiversity loss by engaging companies.

## SOLUTION PROPOSED

Two innovate AI driven products in one, a biodiversity and climate database platform and a biodiversity and climate marketplace.

## TARGET MARKET

European market mainly but have clients in Asia and middle east
SOM: Obtaining 1% of the market by 2030 date → $ 4.20 Bn.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Climate Tech

**TRL**
5

**PATENT**
No, but I plan to apply for a patent

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# Flux Robotics

FLUX ROBOTICS

## SHORT DESCRIPTION OF THE PROJECT

Next Generation Robotics for More Efficient Vascular Surgeries.

## EXTENDED DESCRIPTION OF THE PROJECT

Flux Robotics' Flux 2 robot revolutionizes vascular stent implantation, cutting procedure time from 3 hours to 45 minutes, reducing radiation exposure, and saving up to $20K per patient.

## NEED ADDRESSED

Surgeries last 5 hours; only 1-2 patients treated daily. Guidewire issues lead to 100K deaths annually.

## SOLUTION PROPOSED

We pull guidewires more accurately and safely using our robot. More patients treated in less time, with lower costs and reduced risks.

## TARGET MARKET

Surgeons/hospitals performing complex vascular procedures.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Life Sciences & MedTech

**TRL**
7

**PATENT**
No, but the patent application has been filed



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# .omics

.omics
Programming Biology

## SHORT DESCRIPTION OF THE PROJECT

We are developing an AI-powered plant engineering platform to create personalized crops addressing climate change & food security challenges.

## EXTENDED DESCRIPTION OF THE PROJECT

.omics is pioneering the future of plant engineering by merging cutting-edge AI with biology. Our mission is to craft personalized plants that meet the demands of a changing climate and evolving world, addressing critical challenges like food security and sustainable medicine.
Using multimodal AI models trained on comprehensive plant datasets, .omics aims to make plants fully programmable.
The company focuses on three key areas: discovering and designing new traits, developing optimal genetic constructs for trait introduction, and integrating these traits into commercial elite lines. By leveraging AI-driven insights, .omics seeks to optimize plant engineering processes, reducing guesswork and accelerating innovation.
With a team of experienced scientists and exclusive access to cutting-edge plant data, .omics is positioned to revolutionize the field. Their approach combines AI modeling with hands-on lab work, ensuring practical applications of their innovations.

## NEED ADDRESSED

Improving the efficiency and precision of plant engineering processes (from 10+yrs to <2yrs)
Design of the traits farming / pharma need.

## SOLUTION PROPOSED

AI-powered multimodal platform for plant engineering, enabling precise trait discovery, design, and introduction into commercial lines.

## TARGET MARKET

Seed companies, and biotechnology firms focused on crop improvement and plant engineering.

## FUNDING NEEDED

> 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
AgriTech

**TRL**
4

**PATENT**
No, but I plan to apply for a patent

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# OpenGrant

OpenGrant

## SHORT DESCRIPTION OF THE PROJECT

End-to-end AI grant writing and management for non-profits - 10x faster and 5x cheaper.

## EXTENDED DESCRIPTION OF THE PROJECT

Every year, outdated grant acquisition systems result in billions of euros & millions of man-hours wasted as non-profits are trapped in an expensive, slow, and non-scalable grant application process.
OpenGrant's AI is the answer to this, automating relevant grant finding, decoding grant guidelines into actionable steps, and on the basis of a few user inputs generating full, high quality proposals in minutes not days.
In essence, OpenGrant is the end-to-end service for high quality grant proposals 10x faster and 5x cheaper.

## NEED ADDRESSED

Every year, millions of non-profits spend thousands of euros to win grants in a process that is slow, complex, and expensive.

## SOLUTION PROPOSED

OpenGrant automates grant finding, decodes guidelines into actionable steps, and generates fully compliant, high quality proposals in hours.

## TARGET MARKET

Our target group consists of small to medium organizations in the EU that do not have dedicated grant writers on their team.

## FUNDING NEEDED

< 500.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
GovTech

**TRL**
9

**PATENT**
No



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# SOULA.

## SHORT DESCRIPTION OF THE PROJECT

THE FIRST EMPATHIC ASSISTANT FOR FEMALE WELLBEING
Combination of AI and Neuroscience helping to prevent stress, anxiety, burnout.

## EXTENDED DESCRIPTION OF THE PROJECT

SOULA is a virtual AI copilot helping woman to navigate the most challenging life moments.
- The empathic AI chat with human-like conversations based on couching approach, able to follow communication scenarios based on the user's request.
- Wellbeing tracker to continuously monitor the user's NeuroBalance through simple, quick check-in implemented in the dialogical way.
- Tailored daily wellbeing programs helping to implement useful neuropractices to balance mental state, improve focus, satisfaction and reach NeuroIntegration stage.
- Content, practices for self-regulation, reducing intensity of stress response and leading to a more happier, confident woman.

## NEED ADDRESSED

Mental health therapy low accessibility, not adopted for women, stigma on topics like early menopause, inability of pregnancy, sex relations.

## SOLUTION PROPOSED

24/7 Copilot. Empathetic AI assistant, female tailored practices, daily programs, based on Neurointegration approach, physiology differences.

## TARGET MARKET

Women worldwide, starting from USA b2c female market, followed by enterprises with strong ESG, Gender Diversity social politics (b2b).

## FUNDING NEEDED

> 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Mental Health, WellBeing

**TRL**
3

**PATENT**
No

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# Trag

## SHORT DESCRIPTION OF THE PROJECT

Trag is an AI code review companion.

## EXTENDED DESCRIPTION OF THE PROJECT

Trag helps engineering team to automate code reviews with AI. Think of Trag as an AI staff engineer which always looking into code and makes sure that it complies with the best industry standars, it's secure, well written and follows the guidelines.
With Trag engineering teams spend almost 80% less time in reviewing the code and focus more on shipping quality software to the users.

## NEED ADDRESSED

Trag automates time consuming, human review process. Manual review process is very expensive, prone to human errors and time consuming.

## SOLUTION PROPOSED

Trag automates the code review process do engineering teams can focus on developing new features and moving the business forward.

## TARGET MARKET

Our target market is United States and EU.

## FUNDING NEEDED

Between 500.000 € and 2.000.000 €

**ORIGIN**
Berkeley SkyDeck Europe, Milano

**INDUSTRY**
Developer Tools

**TRL**
9

**PATENT**
No



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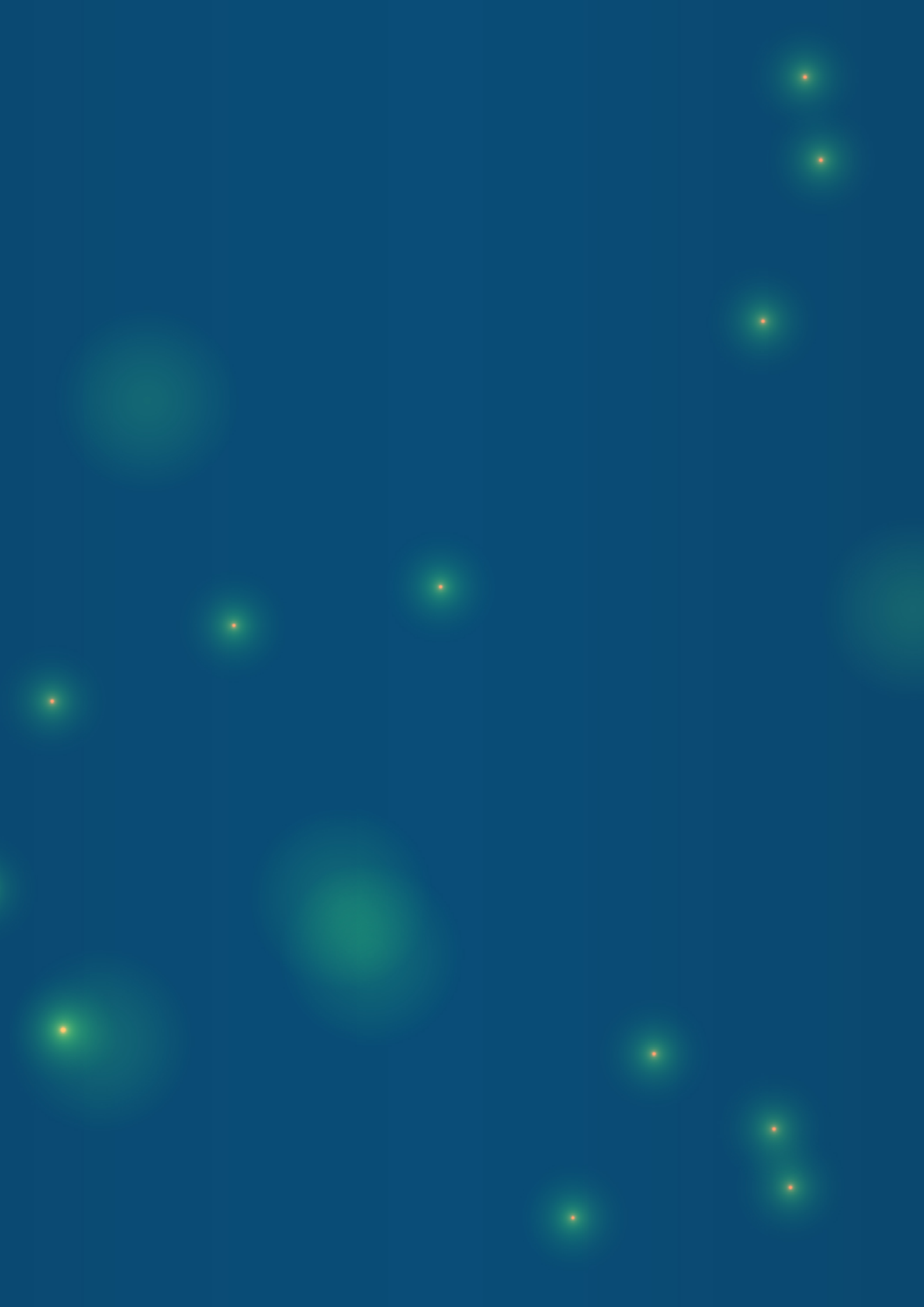
# Chimica Verde

*The “Chimica Verde” (Green Chemistry) competition is still ongoing. We will release a second version of the FutureMatch Digital Handbook, when the selection process will be complete.*

## Stay tuned



# FutureMatch

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