

Venice
Sustainability
Innovation
Accelerator

VeniSIA

The oldest city of the future

On the cover:
Photo taken by Fulvio Roiter,
Acqua alta in Piazzetta San Marco, 2002
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VeniSIA

Prologue

“- There is still one of which you never speak.

Marco Polo bowed his head.

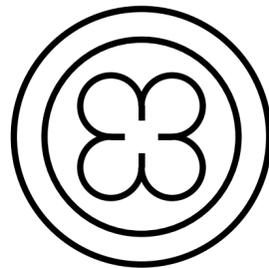
- Venice, - the Khan said.

Marco smiled. - What else do you believe I have been talking to you about?

The emperor did not turn a hair. - And yet I have never heard you mention that name.

And Polo said: - Every time I describe a city I am saying something about Venice.”

Italo Calvino, Invisible Cities, 1972



**Venice
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VeniSIA

Aim of this document

At the conclusion of the first accelerator program, scheduled for December 2021, VeniSIA introduces the acceleration plan for 2022, devoted to the development of **business ideas and technology solutions** for circular economy.

The document's aim is to attract institutions, companies and individuals who share the belief that **VeniSIA (Venice Sustainability Innovation Accelerator)** is the perfect background to provide ideas and solutions for those sustainable development challenges that are applicable to Venice fragile and unique environmental ecosystem, and yet scalable, to the **benefit of the whole planet.**

With this aim, the document presents:

1. VeniSIA's executive summary, introducing Venice's problems, solutions and benefits;
2. VeniSIA's mission and vision, and its ambition to repopulate Venice;
3. VeniSIA's location, supporting the choice of Venice as a highly effective one;
4. VeniSIA's way of working, starting from its operating model.



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1

VeniSIA

Executive summary

I

The problems of (not only) Venice

Venice is facing vital sustainable development challenges, such as drowning, over-tourism, depopulation, and other extraordinary cities share similar environmental and social problems.

Sustainable Development Goals (SDGs) are an urgent call to action for people and countries but also for companies that have to implement new production models. The latter require to develop and test new business ideas and technology solutions.

Companies can be:

1. sustainability **Supporters**, if sustainability is a **CRM goal** to be developed;
 2. sustainability **Providers**, if sustainability is their **core business** to be developed;
 3. sustainability **Seekers**, if sustainability is a **strategic opportunity** to be exploited.
- VeniSIA is a corporate accelerator and its ambition is to collect all global efforts to achieve the SDGs, mainly related to climate change and other environmental problems, with the ultimate aim to turn Venice into the oldest city of the future.

II

The solution powered by VeniSIA

VeniSIA copes with Venice sustainable development challenges through an

acceleration process where:

1. **established companies identify their main sustainable development challenges:** VeniSIA supports international and national companies to design a sustainability innovation project, with the aim to develop it through the activation of a corporate lab in Venice;
2. **sustainability researchers and start-uppers develop consistent solutions:** VeniSIA supports companies to identify and engage, in the corporate lab, national and international most qualified researchers and start-uppers;
3. **master's students get internships within the corporate labs:** VeniSIA supports companies to identify and engage, in the corporate lab, (not only) Ca' Foscari University best master's students along their internship to support the sustainability innovation projects;
4. **additional independent smart workers join Venice:** VeniSIA establishes and manages a community of innovators,

able to attract worldwide smart workers, interested in a unique living and working experience in Venice.

VeniSIA copes with the sustainable development challenges exploiting Venice as the perfect **acceleration context**:

1. **to attract researchers and start-uppers**, and additional smart workers, allowing them to live a unique life experience while coping with the extraordinary sustainability challenge of saving the most beautiful city in the world;
2. **to inspire VeniSIA's community of innovators** to turn tradition into innovation, since Venice represents the frame of reference to provide guidelines about what survived in the economic, social and cultural evolution, therefore encompassing the idea of sustainability;
3. **to conduct an "in vivo" experiment** to test innovative technology solutions and SDGs-driven business models, thanks to both the city's small size and the big sustainable development challenges it faces;
4. **to promote a sustainability innovation project worldwide**, as a first step to unlock

its market potential, and consequently the brand of the established company, exploiting Venice international visibility as a marketing booster.

III

The benefits for business and society

Companies benefit from VeniSIA because they get:

1. **a certain increase of their brand awareness**, proving sustainability and innovation leaders to meet the SDGs with the aim to save Venice;
2. **a probable solution of their main sustainable development challenges**, leveraging VeniSIA community of innovators and Ca' Foscari University physical and intellectual assets;
3. **a possible commercialization of the solutions** if they can prove to be able to cope with global challenges, promoting them to international investors and venture capitalists (VCs).

People and planet benefit from VeniSIA because it allow:

1. **a certain avoidance of Venice's destiny as a deserted flooded Disneyland**,

repopulating the city with a community of innovators to turn it into the first 100% sustainable city, the oldest city of the future;

2. **a probable exploitation worldwide of the successful new business ideas and technology solutions** to climate change and other environmental challenges, as, if they work in Venice, they will work everywhere.

VeniSIA's ultimate ambition is to make Venice a successful example for the whole world in terms of human capacity to fix its mistakes. VeniSIA's ultimate ambition is **not to make an accelerator in Venice but to make an accelerator out of Venice.**

2.1

Sustainability Deep Tech

According to the UN International Panel on Climate Change (IPCC), the major floods that have so far affected some coastal cities and islands once every 100 years could become annual events by 2050. And, if emissions continue to rise, global sea levels will get one meter higher by the end of this century.

Recently, we witnessed huge, record-breaking floods, and Venice Aqua Granda in November 2019 is probably the most impressive example of the global emergency we are dealing with. **Solutions to climate change challenges help to solve many other global environmental problems** (air, soil and water pollution, ocean acidification, biodiversity loss, land system change, etc.).

Venice is exposed to an additional issue,

related to its dependence on a tourism-driven economy. Suddenly, **the city revealed its fragility and the minus of a monoculture business** dominating the town, losing more than 30M presences of tourists p/year in a 5 km2 historical city. The drop of presences adds to the depopulation of Venice, losing 1,000 residents p/year because of the high costs of housing and offices.

Environmental scientists warned us to make fast and radical changes on current consumption and production models (energy, transport, etc.) in order to limit the temperature increase within 1.5 degrees Celsius by the 2nd half of 21st century, as the Paris agreement in 2015 and COP26 in 2021 stated. Consequently, environmental economists warned us to make fast and radical changes on current business models.

The goal is to transform the “either/or” relationship between the dimensions of sustainable development (environmental & social vs. economic) in a “both/and” one. The “sine qua non” condition is to shift **from linear business models to circular ones**. Only radical business models’ innovation, mediating between technology development and profit creation, will let us achieve the environmental SDGs.

VeniSIA addresses the SDGs through a **Deep Tech** approach. It is a problem-oriented (not technology-driven) approach to innovation, it is not about finding the best use case for a new technology, rather, the new technology has to be the best solution among all possible solutions to solve a current problem. Deep Tech ventures, adopting a problem-oriented approach, very often work on solving large and fundamental issues: 97% of them contribute to at least one of the UN's SDGs.



On the left:
St. Mark's Square, November 2019
Credits © Paolo Colombatti Rai Tgr Veneto

On the right:
Deep Tech ventures & SDGs
Copyright: Hello Tomorrow and Boston Consulting Group, 2021

Deep tech ventures innovation addresses big problems

Deep tech ventures contribute to addressing big issues such as the Sustainability Development Goals



Share of surveyed deep tech ventures contributing to each SDG (% one venture can contribute to more than one goal)



1. 1277 companies surveyed (in 2018/2019), many start-ups address more than one UN Sustainability Development Goal
Sources: Hello Tomorrow Challenge, BCG & Hello Tomorrow analysis



2.2

Innovation Past, present and future

Venice is a global example of the need for sustainability innovation, since it is one of the cities suffering most because of environmental unsustainability. It suffers the effects of climate change on a daily basis: seasonal floods get more frequent and last longer, damages to historical buildings and monuments increase and the risks to lose some of the most significant masterpieces is round the corner.

Venice was a global example of environmental innovation. Since its founding in March, 421, as a cluster of 124 island settlements, Venice gradually merged into the city we know today. The city was designed as an effort to save land from the lagoon and defend it from the sea. Buildings built on wooden stilts, without fixed masonry, were designed to adapt to a muddy ground.

Venice was a global example of social innovation. It was the longest surviving independent republic, able to innovate its government and develop a complex system of checks and balances and to attract and integrate different people and cultures. It also made the first attempt to reduce poverty, as the “Scuole” (Schools), developed in Venice since the 13th century, were private institutions able to collect donations and reduce poverty and other social problems of the time.

Venice can be a global example of sustainability innovation. It must become the first 100% sustainable city: “the oldest city of the future”. The rich diversity of the city’s urban and cultural fabric, its uniqueness and dynamism naturally give Venice a leading role in sustainable living, emerging from a new dialogue between liberal arts and science, humanities and technology, biology and engineering, tradition and innovation.

Below, on the left:
- First “Bird’s-eye view map of Venice” from a 300 meters distance, 1500 - Jacopo de’ Barbari

Below, on the right:
- From Accademia bridge to the Basilica St. Mary of Health. Photo taken by Karsten Wurth on unsplash.com



Venice was a global example of business innovation. Global trading, stable currency and advanced manufacturing. The first modern industry in the world was the “Arsenale”. Built in 1104, it was a complex of shipyards and armories of the Serenissima Republic. Methods for the mass production of ships, based on the standardizing of different elements in different areas, made the construction of an entire ship possible in only one day, on an assembly-line basis.





2.3

The sustainable development challenge requires radical changes in institutional politics, but firstly in individual behaviours. Incremental adaptations, like the inclusion of a drop of sustainability to the current way of eating, getting dressed, heating, cooling, traveling, etc. will not be enough. We need a brand new way of living.

Venice founders faced similar challenges 1,600 years ago, when they escaped from the chaos of the collapsing Roman Empire and settled down on the lagoon's archipelago: those people were able to turn a muddy ground into a free republic of unequaled prosperity. This result was achieved through century-long innovation efforts.

Accelerator Mission & Vision

The sustainable development challenge requires radical changes in consumption and, accordingly, in production models. The latter need disruptive technology, but also strategy innovation. Business model innovation could act as a catalyst for system-wide sustainability transitions.

Thanks to its natural and cultural heritage, **Venice is the perfect living lab to generate, develop and test radical new Deep Tech solutions and business models** devoted to harmonize social, environmental and economic sustainability. Only profitable initiatives can survive, but only sustainable ones can persist in the long-term.

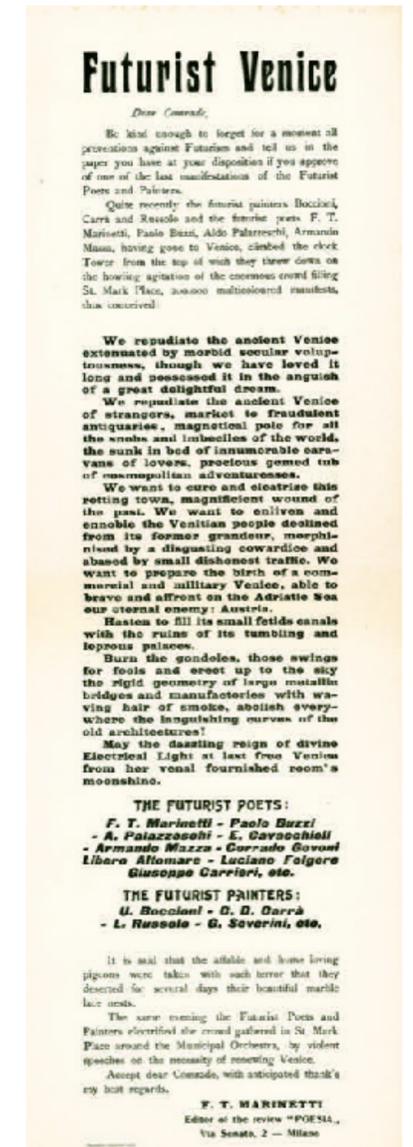
Thanks to its natural and cultural heritage, **Venice is the perfect setting to attract environmental and life scientists and economists, engineers and designers, academics and professionals, policy makers and entrepreneurs worldwide.**

They can gather in Venice to work and live as new residents and interpreters of its intellectual and professional life.

VeniSIA's mission is to support companies in leveraging Deep Tech as a new approach to problems to build solutions to the world's biggest sustainability challenges. It aims to identify, scale and commercialize impactful sustainability technology solutions through business model innovation.

VeniSIA's vision is to create the first European most comprehensive ecosystem with a relentless focus on human capital to nurture sustainability and leverage a Deep Tech approach to innovation to build solutions to the world's biggest sustainability challenges. VeniSIA's ultimate ambition is not to make an accelerator in Venice but to make an accelerator out of Venice.

VeniSIA's ambition is thus to leverage a Deep Tech approach to deal with sustainability challenges and commercial and industrial programs for the next generation of entrepreneurs, repopulating the city with new talented residents, living in Venice for the long-term, turning them "from temporary tourists into permanent futurists".



3.1

VeniSIA will become the most important start-up accelerator addressing the environmental SDGs and unlocking the economic opportunities they offer. VeniSIA aims to identify, scale and commercialize impactful technology solutions through the business model innovation.

A butterfly effect framework explains why an environmental SDG-driven start-up accelerator must be located in Venice because of a dual space-time rationale, where space refers to the development of local solutions to win global challenges and time refers to the transformation of tradition into innovation.

“In stark opposition to the monoculture of the dull global city engulfing the planet, the historical city is a thinking machine. It enables us to think about something other than ourselves, and thus helps us learn about ourselves in the process. [...] A city with a long history of cosmopolitanism, Venice can still be a testing ground for an inclusive notion of citizenship relevant to our times. [...] Venice is the paradigm of the historical city, but also of the modern city like Manhattan. It's a thinking machine that allows us to ponder the very idea of the city, citizenship practices, urban life as sediments of history, as the experience of the here and now, as well as a project for a possible future.”

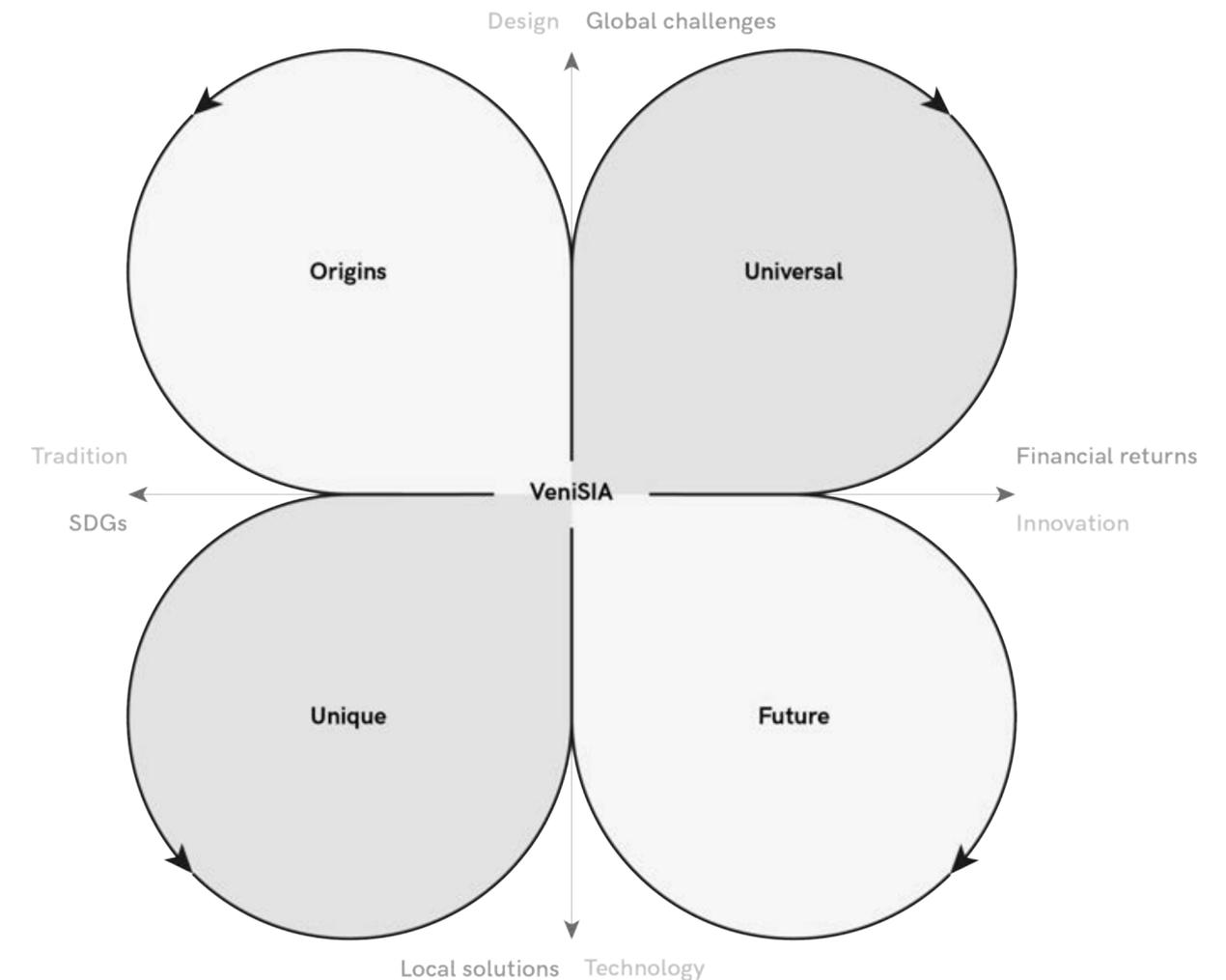
Salvatore Settis, *If Venice Dies*, 2016

Space-time rationale Why in Venice?

Environmental SDGs are the starting point of the space rationale. To achieve them, new business ideas and technology solutions need to be developed and tested. Venice is the perfect place to conduct an “in vivo” testing, thanks to both the city’s small size and the enormous sustainable development challenges it faces. Local solutions explored in Venice can then be exploited worldwide in order to solve global challenges. The international scalability of local solutions enables financial returns on investments, namely a precondition to pursue SDGs, thus generating an ongoing virtuous circle. The “attractors” of this ongoing circle show two tensions. The unique experience of living and working in Venice, as well as the universal visibility of the city can together attract the world’s brightest minds (researchers, start-uppers, etc.) and biggest players (VCs, multinationals, etc.) in order to create a community of new residents.

Innovation is the starting point of the time rationale. To meet the environmental SDGs requires technology innovations and also business model innovations in order to commercialize them successfully. SDGs require as well design or meaning innovation because people buy products not only for their functions, but also for the messages they carry. Thanks to its history, Venice is the perfect place to imagine new meanings and messages. In this sense, Venice’s tradition could turn into worldwide innovation, generating another ongoing virtuous circle. The “attractors” of this ongoing circle show two additional tensions. Since its origins, Venice has been coping with its fragile environment and thus became a universal example of resilience and adaptation. Today Venice is in danger, due to severe flooding, over-tourism and depopulation, and the global duty is to guarantee its future.

VeniSIA's motto is: **“Back to unique origins, into a universal future”.**



3.2 Sustainable Development Goals

Environmental and social sustainability

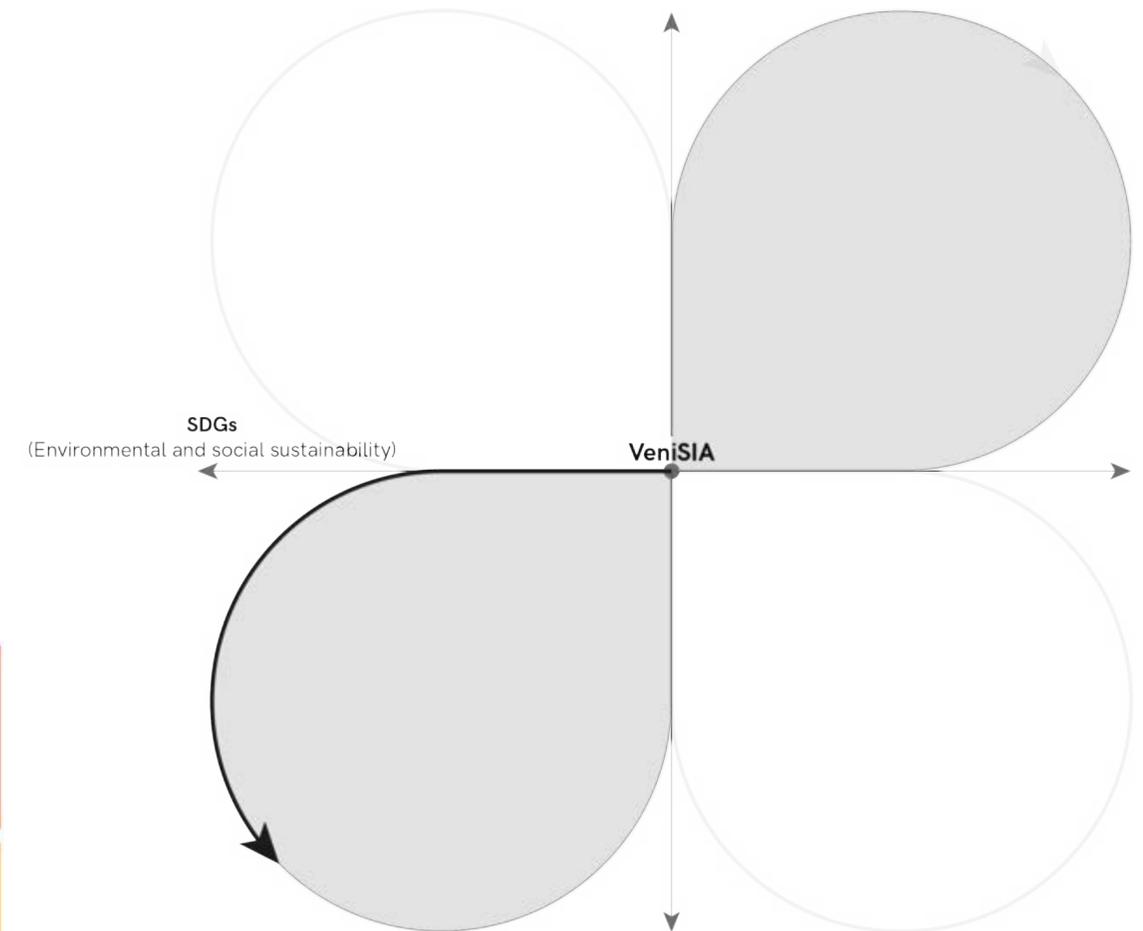
The **2030 Agenda for Sustainable Development**, adopted by United Nations in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the **17 Sustainable Development Goals (SDGs)** with 169 associated targets, which are an urgent call to action by all countries in a global partnership. SDGs have the power to create a better world by 2030, by ending poverty, fighting inequality and addressing the urgency of climate change. Global warming, sea-level rise and other climate change impacts are seriously affecting low-lying coastal areas, and to save Venice from drowning is one of the greatest symbolic challenges of our time.

With these SDGs and targets, the UN is setting out a supremely ambitious and transformational vision. The fulfillment of this vision requires not only an extensive collaboration across the private sector, governments and civil society, but also significant investments and innovations.

New business ideas and technology solutions need to be developed and tested. Since both have strong environmental and social implications, they cannot be tested in a lab, but they require an “in vivo” testing.

Venice is the perfect place to host these tests, thanks to both the city’s small size and the huge (not only) environmental and social problems it faces.

Below:
UN Sustainable Development Goals,
resources for sustainable development



3.3

Venice encompasses many different fragile environments in a relatively small area. It is a historical city, but always affected by tourism-congestion and periodically flooded with *acqua alta*. It is located in a delicate lagoon ecosystem, threatened by large merchant and cruise ships, in front of one of the biggest Italian petrochemical poles which is in need of remediation and reconversion.

Venice, built on water, is progressively losing residents, currently down by about a 1,000 p/year to about 50,000 inhabitants, as a result of high rents and living costs induced as a byproduct of overtourism and business. Beyond environmental innovation and social and economic benefits, VeniSIA contributes to keep residents in the city, stopping the bleeding and bringing a cultural value added.

Venice, together with its metropolitan extension, including Mestre, Padua and Treviso, is part of a highly urbanized and

Local solutions Venice as a city lab

industrialized metropolitan area, endangered by serious PM10 and PM2.5 pollution problems. Therefore, despite its small size, Venice copes with many SDGs and associated targets.

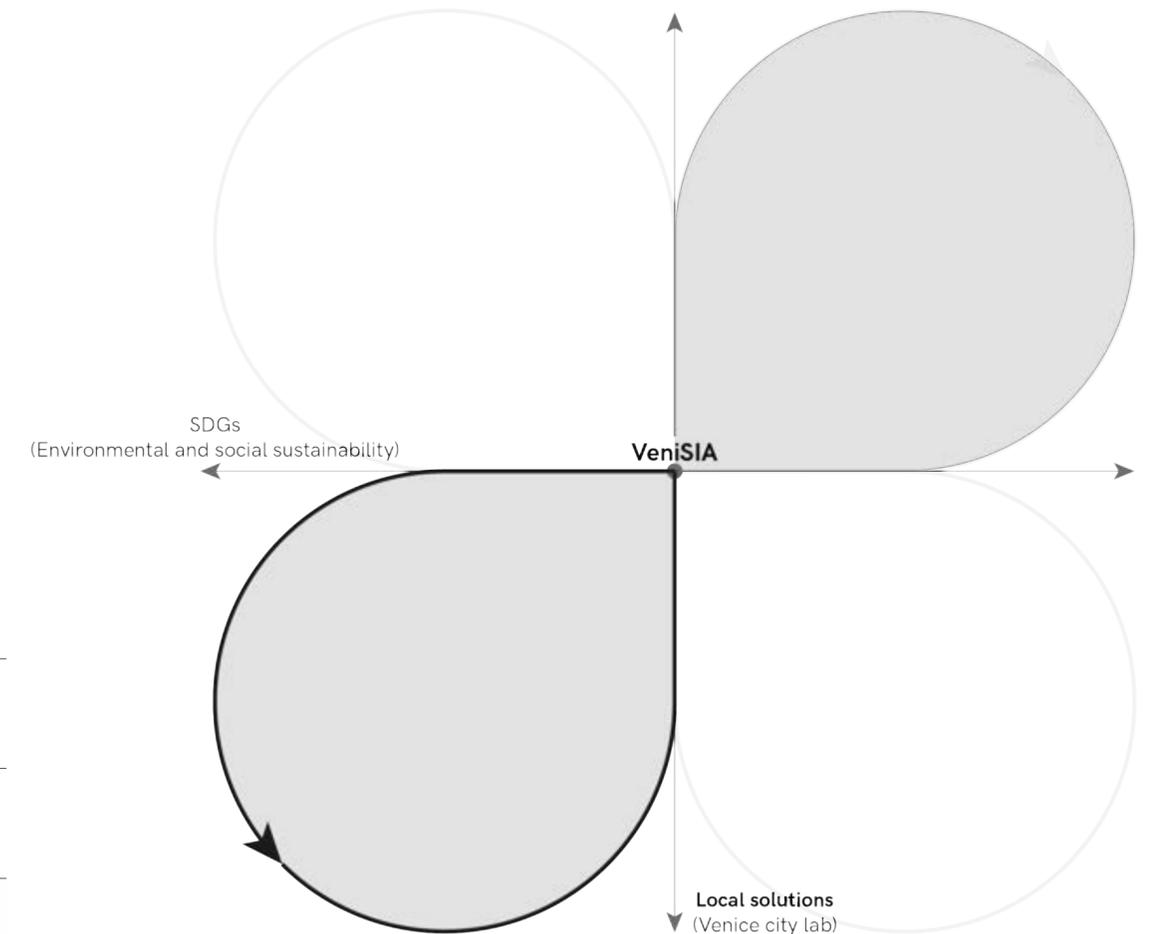
Venice as a city lab will host corporate labs. Funding companies can be:

1. **international Supporters** of a broad sustainability action on climate change and clean energy;

2. **international and national Providers** of a sustainability innovation solution for sustainable cities, underwater life and clean energy, using labs as well as showrooms;

3. **national Seekers** of a sustainability innovation project to re-startup the company through the activation of a corporate lab in Venice, coherently with sustainable production and clean energy.

| | | | |
|--|---|---|---|
|  |  | | |
|     |  |   |   |
| <p>International Sustainability Solutions Supporters</p> | <p>Sustainability</p>  | | |
| <p>International & National Sustainability Solutions Providers</p> | <p>City Lab & Showroom</p>  | | |
| <p>National Sustainability Solutions Seekers</p> | <p>Company Re-Start-up</p>  | | |



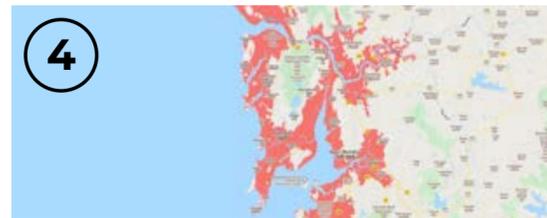
On the left: UN Sustainable Development Goals affecting Venice

3.4

New business ideas and technology solutions will turn Venice into a **100% sustainable city** and will be exploited worldwide, as they will work everywhere if they work in Venice. International scalability ensures economic sustainability as well. A paradigmatic example of a local protection solution against drowning is available, concerning a system of mobile gates installed at water inlets, between open water and the lagoon.

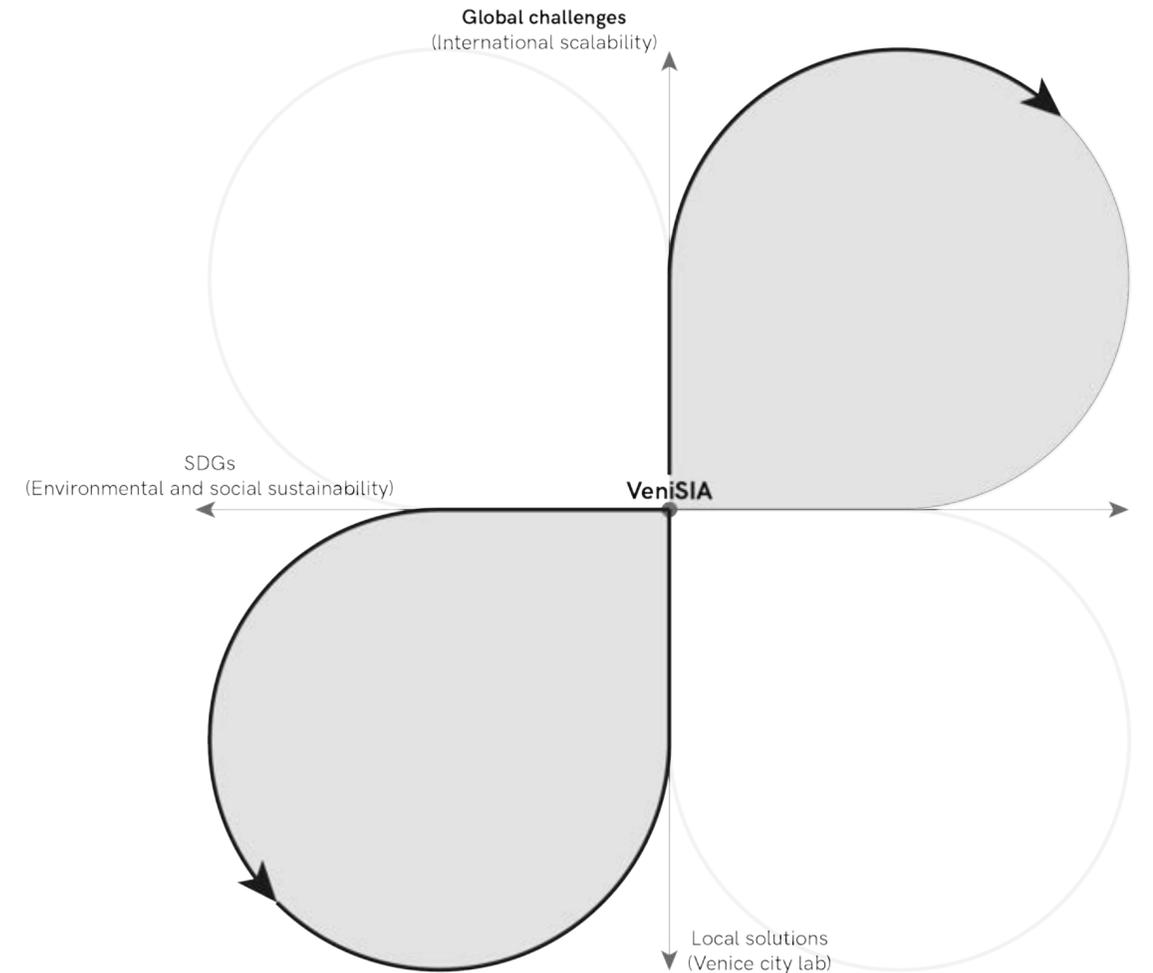


Global challenges International scalability



Starting from the experiences of ideas developed in Venice, improved technology solutions can be developed and implemented to **save other extraordinary cities which share a similar fate.**

By 2050, Mumbai, Amsterdam, Ho Chi Minh City, Alexandria and New Orleans could be submerged, forever gone. These are sisters in spirit to Venice - built on fragile natural ecosystems, with hundred-year-old unique cultures and of historical importance. We can solve our problems better and faster by uniting with similar cities.



- On the left:
- MOSE - Photo from Wikimedia Commons
 - City maps - Land projected to be below tideline in 2050:
- 1) Venice
 - 2) New Orleans
 - 3) Amsterdam
 - 4) Mumbai
 - 5) Ho Chi Minh City
 - 6) Alexandria

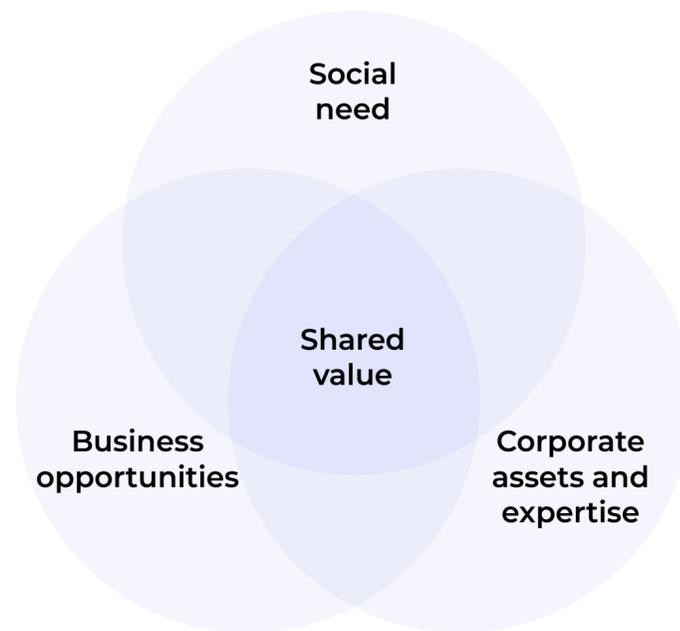
3.5

We are facing a time of immense environmental and social challenges to sustainable development. It is, however, also a time of immense economic opportunities. The SDGs are integrated and indivisible and balance the **three dimensions of sustainable development: the environmental, social and economic ones.**

Significant progress has been already made in meeting many sustainable development challenges. The spread of information and communication technology and global interconnectedness has great potential to accelerate human progress, to bridge the digital divide and to develop knowledge societies, in the same way scientific and technological innovation does across areas as diverse as medicine and energy. However, further significant progress is ready to be made.

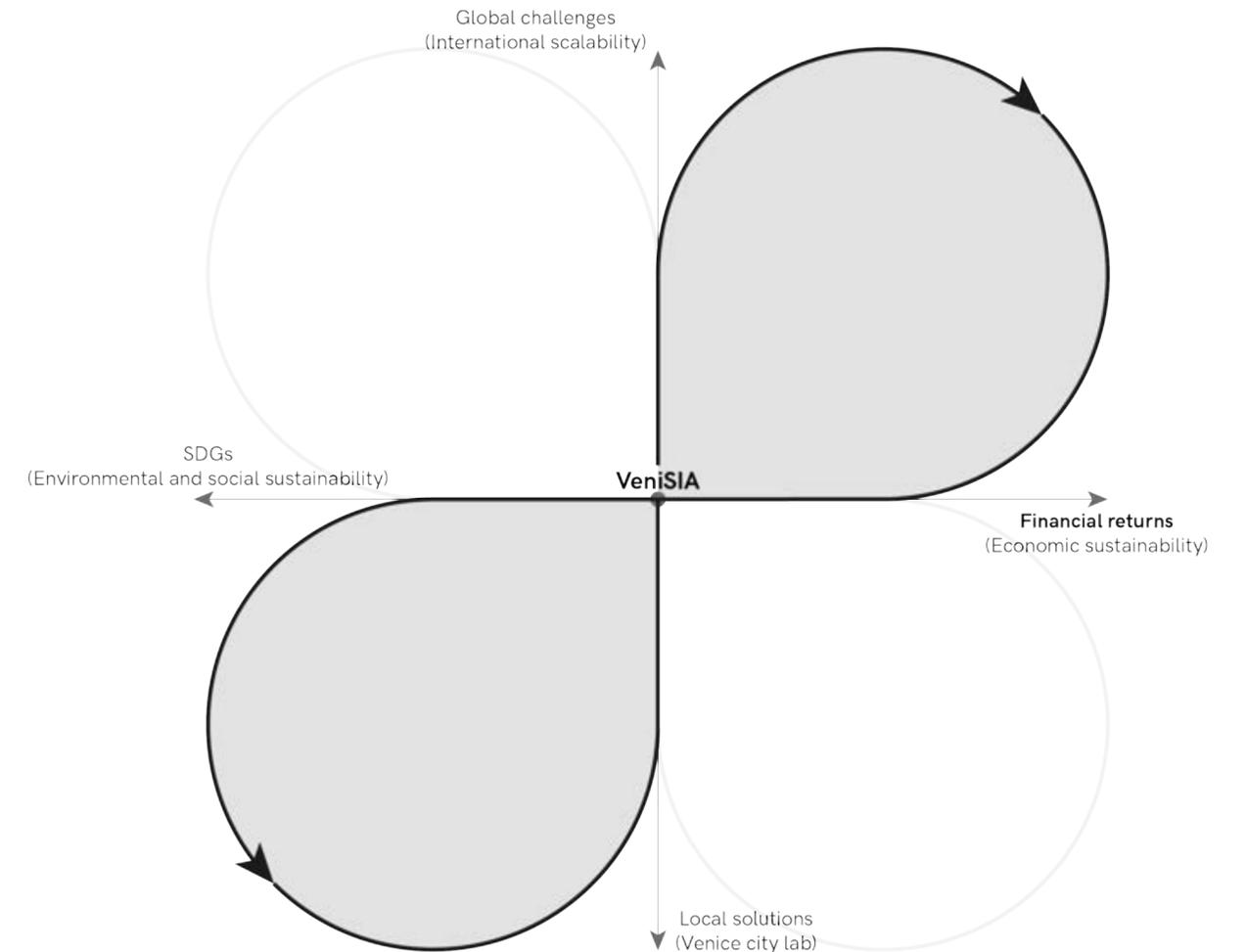
Achieving the SDGs is an unquestionable moral imperative, but the task also presents a significant market opportunity: electric vehicles, telehealth

Financial returns Economic sustainability



and circular business models could generate work for more than 10% of the labor force in 2030. In January 2017, the Business and Sustainable Development Commission estimated that meeting the **SDGs could unlock \$12T a year in the private sector** in terms of business revenue and savings across four economic industries: food and

agriculture, cities, energy and materials, and health and well-being. Analysis from the Global e-Sustainability Initiative shows that **digital industry could generate \$2.1T** of additional annual revenue in 2030 from technology solutions with a positive impact on the SDGs. Meeting the SDGs offers the greatest business opportunity of our time.



3.6

Unique experience Life transformation

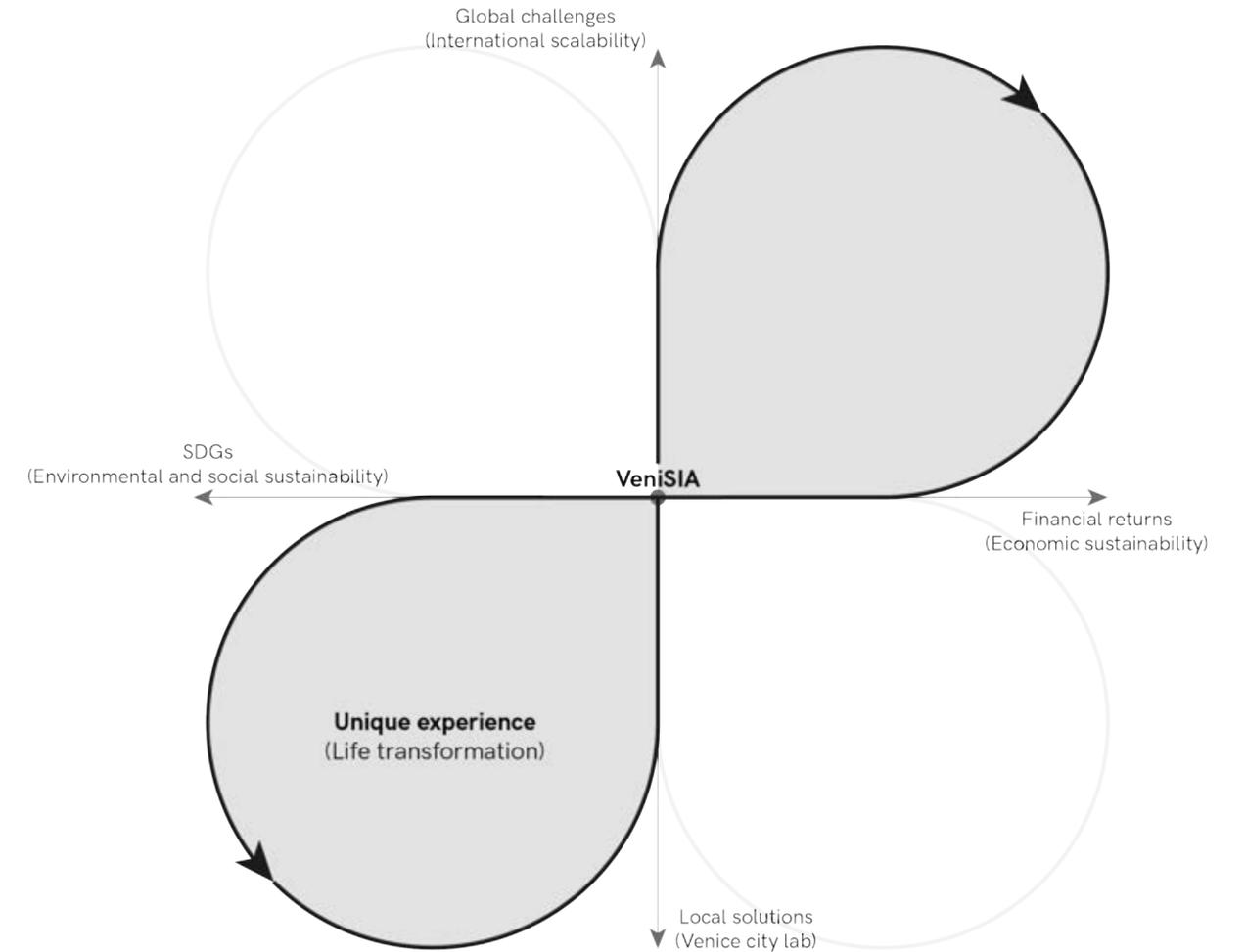
Framed in its unique beauty, Venice has been **a contemporary city par excellence** for centuries: open to the world, inclusive, resilient to a fragile environment, industrious, a living laboratory of art and culture, of craftsmanship and of innovation. Much of that legacy still permeates the city.

Venice is not a functional space in need to be peopled; rather it is **a distinctive place in need to be lived**. It is unique, since it is characterized by enchanted places, peculiar historical facts, traditional and innovative events, art masterpieces and even original words as “ciao”, an alteration of the medieval Italian “*sclavus*” which means “(I am your) slave”. Venice was the home of famous writers, painters, scientists, directors and actors.

Living in Venice is **a unique experience of life transformation**, able to attract anyone: researchers, start-uppers, VCs, policymakers, artists, philanthropists from anywhere.



On the left:
“Support” by Lorenzo Quinn, 2017 - Monumental hands rise from the water in Venice to highlight climate change
Photo taken by Hans M on unsplash.com



3.7

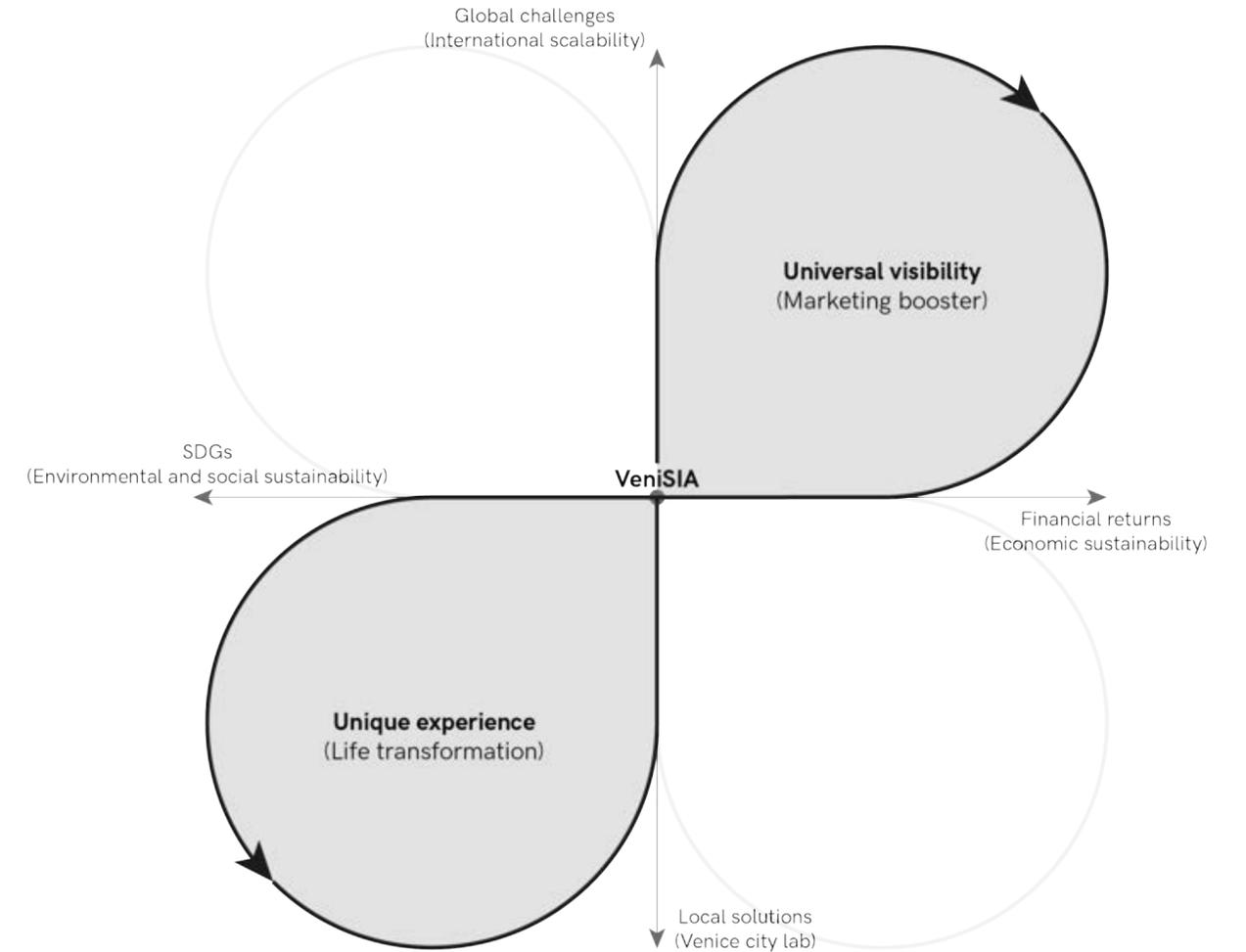
Universal visibility Marketing booster

Venice is able to transfer local values to a global level: it has such an intense unique personality that it can be turned into a universal stage. The switch is from a “think-global-act-local” vision to a “**think-local-act-global**” one. To launch a start-up in Venice means to promote an innovative project worldwide. VeniSIA provides all start-ups with the potential for global visibility, the power to raise capital, a network of global entities (corporations,

VCs, partners, etc.) and mentorship opportunities needed to pioneer technological breakthroughs. Since 1895, the Venice Biennale has sped up the exposure of new, unknown artists, architects and movie directors acting as an art ideas accelerator. VeniSIA speeds up the exposure of the next generation of entrepreneurs acting as **an accelerator of business ideas and of technology solutions.**



On the left:
Banksy's unauthorized installation on a house in Venice, near Campo San Pantalon, 22/05/2019. The artwork portrays a migrant child wearing a lifejacket and holding a neon pink flare.
Credits © Gorupdebesanez



3.8

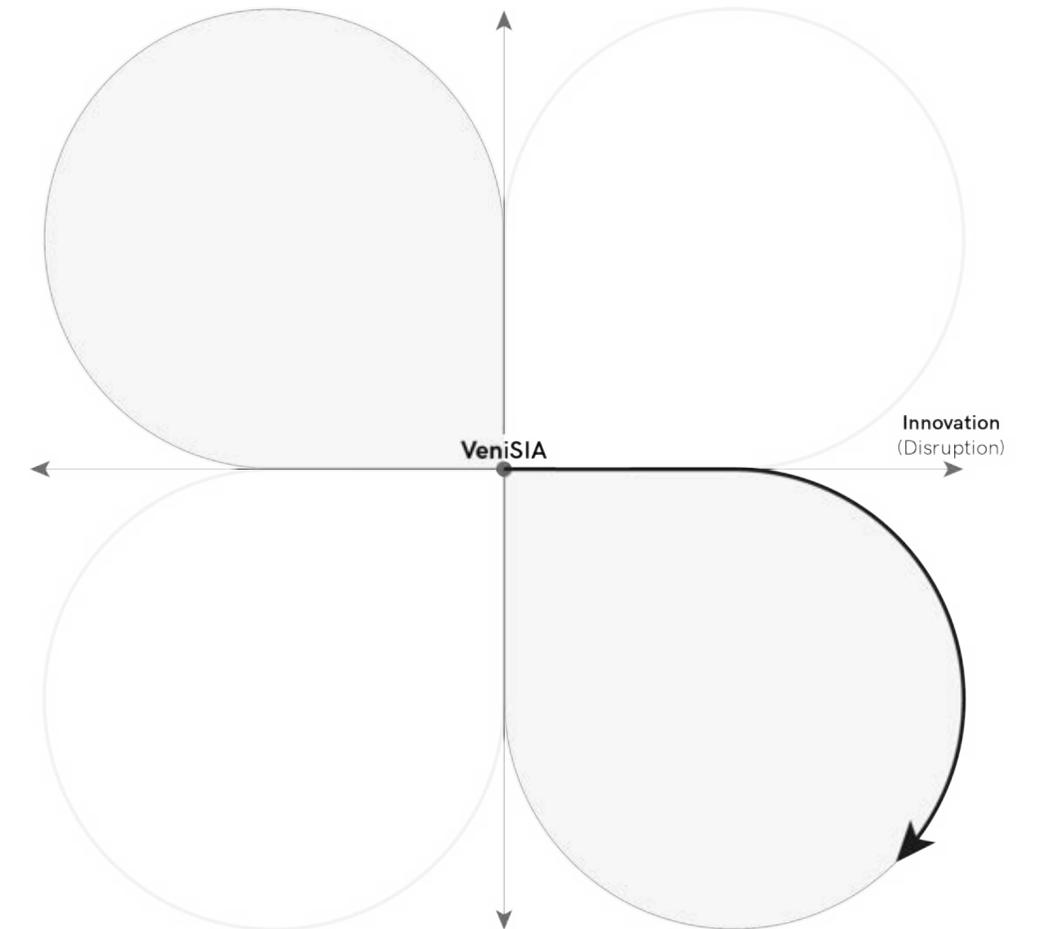
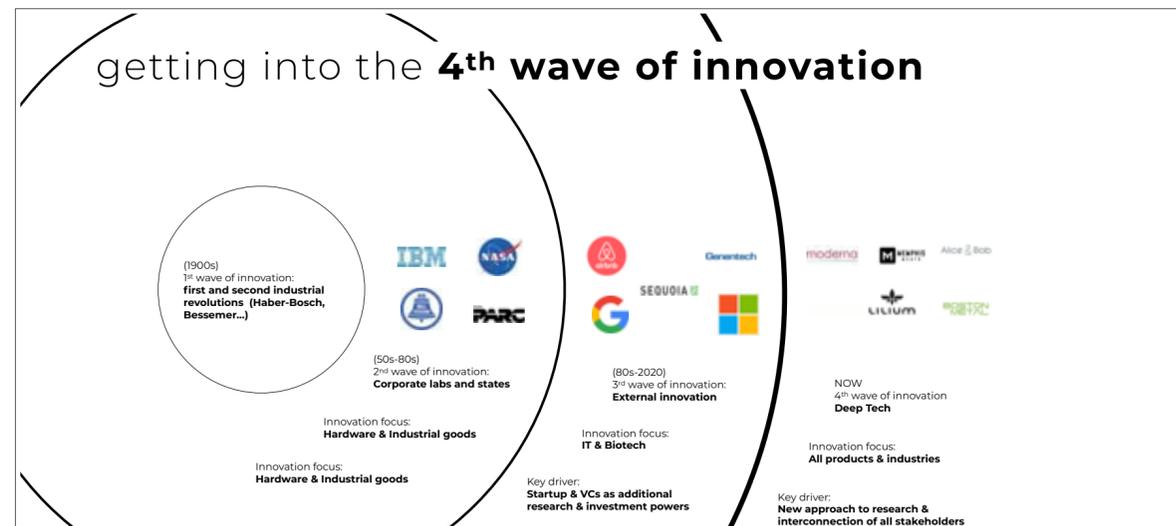
Meeting of the SDGs requires new ideas and technologies, but also fresh thinking about economic paradigms and ways of doing business. Most people and organizations are not bad at having creative ideas, but to turn those into **successful market innovations** is much harder. It is even more compelling when innovations have strong environmental and social implications, because it is more difficult to seize their market opportunities.

New ideas and technologies require new business models to be successfully commercialized. Business model innovation is a key driver for differentiation and competitive advantage. The development of innovative SDGs-driven business models should answer to three main questions in a disruptive way: “Who are our stakeholders? What do we offer them? How are we doing this?”.

Innovation Disruption

Deep Tech approach is problem-oriented and it contributes to meeting big challenges such as the SDGs. One of the most foundational development powered by Deep Tech is **Nature Co-Design**. It is where **biology, material science and nanotechnology meet to leverage nature’s design principles and manufacturing capabilities at the atomic level**. Nature Co-Design opens entirely new economic lanes of growth while also addressing the challenges entailed by diminishing finite resources and climate change.

VeniSIA gives the opportunity to leverage nature as an engineering and manufacturing platform through Nature Co-Design, supporting the **shift in the way companies deal with matter. Synthetic biology**, through cell engineering and organism design, represents a very important component of this shift. Beyond life science, all manufacturing industries will be impacted, with no exception. Nature Co-Design has the potential to impact ~ 40% of global GDP, equivalent to a value of +\$30T, and to fundamentally disrupt two Italian industries: **farming and textile/fashion**.



On the left: “The 4th wave of innovation”
 Copyright: Hello Tomorrow, 2021



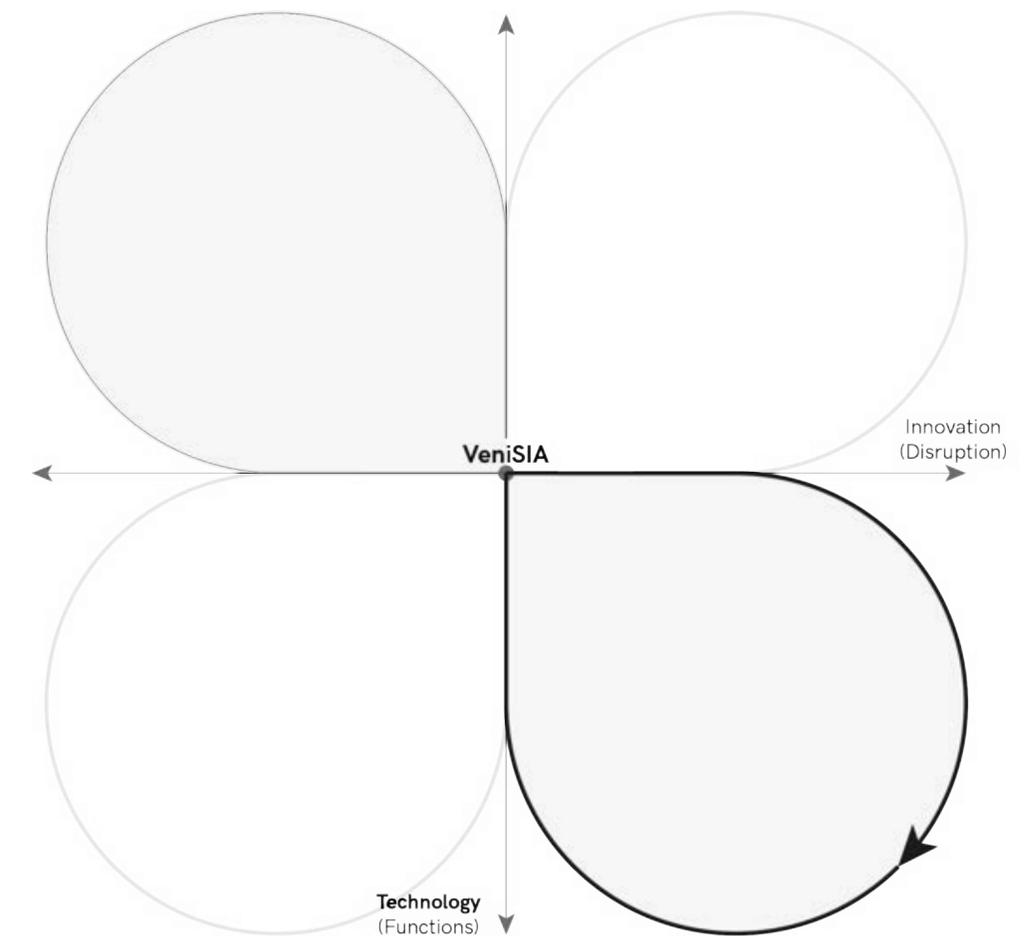
3.9

Achieving of the SDGs requires the deployment of technologies in order to address critical human needs. The **technology industry** draws on the belief that every challenge, no matter how big, has a solution and that technology has already been a positive force in making the world a better place to live in. In the last ten years, technology has become more embedded in our lives, connecting millions of devices and billions of people. **Digitalization** is already supporting democratized and decentralized access to energy, finance and education. It has enhanced our lifestyles, allowing us to share knowledge and ideas, to connect with our beloved ones and even to improve our health. But the next ten years will demand technology to think bigger and bolder than ever before.

Technology Functions

Nevertheless, we do not know the impact that these transformations can have on production, employment, health and prosperity. Specifically, **Deep Tech** is based on tangible engineering innovation or scientific advances and discoveries. Deep Tech is the generic term for technologies not focused on end-user services that includes artificial intelligence and machine learning, robotics, blockchain, advanced material science, photonics and electronics, biotech and quantum computing, processing and computing architecture innovations, advances in semiconductors and electronic systems, power electronics, vision and speech algorithms and techniques, haptics and more. Deep Tech is often set apart by its profound enabling power and its potential to catalyse change. On the contrary, we know that technology should extend and widen, not substitute, human ability to act. **Man must be the center**, the same way he is in Leonardo da Vinci's draw of the "Vitruvian Man", displayed at the Accademia Gallery in Venice.

One of Venice main challenges is, indeed, SDG 11.4: Protection of cultural and natural heritage. [Ca' Foscari University of Venice](#) developed the Center for Cultural Heritage Technology with the [Italian Institute of Technology](#), namely the most important research institute in Italy that promotes excellence in basic and applied research. CCHT is a strongly interdisciplinarity-oriented infrastructure for Digital Humanities, which applies digital analysis for the conservation of Cultural Heritage materials and nanotechnologies for preservation and restoration of wood, stone, marble.



On the left:
 - "Vitruvian Man" by Leonardo da Vinci,
 Credits © Quibik
 - Photo taken by ccht.iit.it

3.10

It is a unique, unprecedented and exciting time to push forward technology innovation, but also design-driven innovation, in pursuit of the environmental SDGs at the scale the world needs.

Emotional design is fundamental to make technology solutions beautiful and meaningful. People buy products, even technological ones, not only for their functions and performance, but also for their aesthetics and the meaning they carry. Products have a technical dimension, which concerns utility, reliability, simplicity, price, etc., and a semantic dimension, which concerns shapes, symbols, emotions, status, etc.. **Sustainable design, instead, is fundamental to make technology solutions eco-friendly.** It seeks to reduce or completely eliminate their negative impacts on the environment and people.

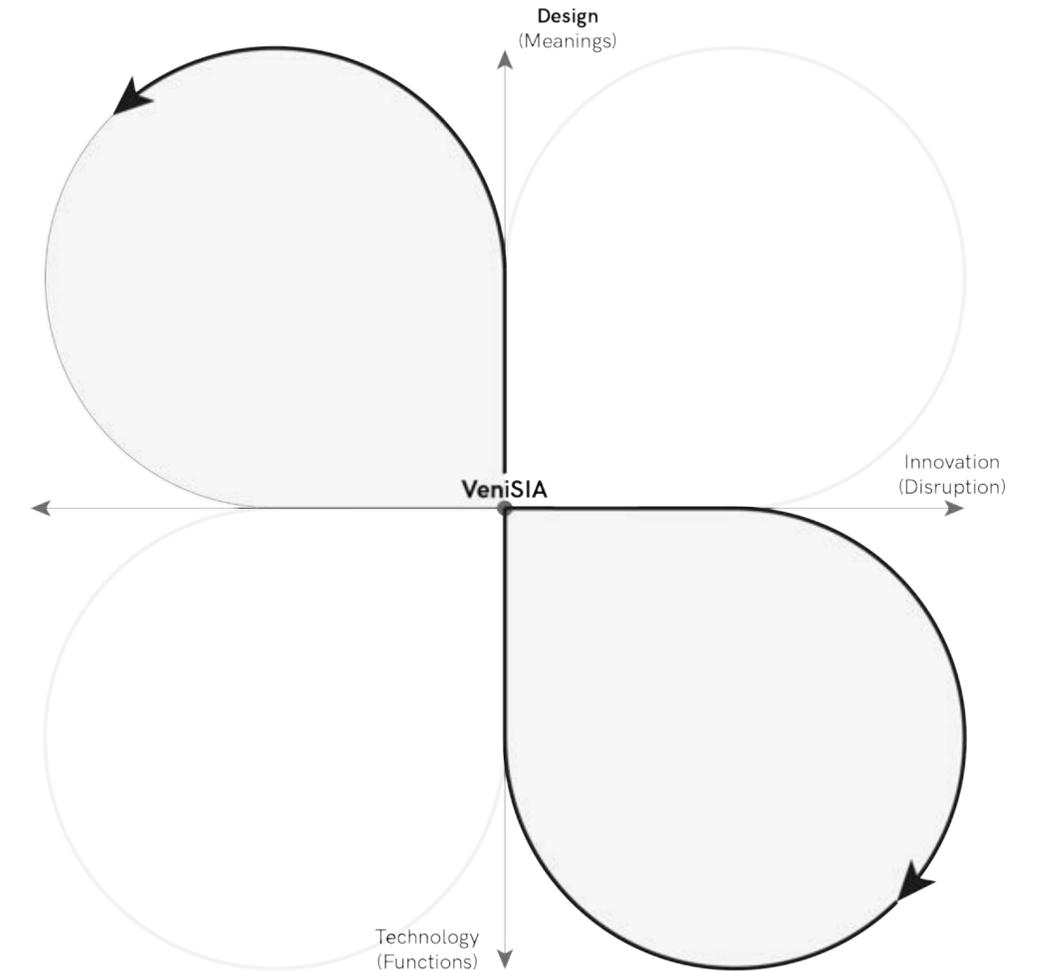
Regardless of the application, sustainable design should incorporate the following key principles: thinking in systems,

Design Meanings

deciding how things relate to their larger system; dematerialisation, getting more “service” from less product; renewable, natural materials, using harmless materials and processes; biomimicry, working with nature by being like nature; cradle-to-cradle, thinking of materials and components as being in a “nutrient” cycle. To design sustainable business ideas and technology solutions there are two key questions to consider:

- are we doing the right things?
- are we doing things right?

A key partner of VeniSIA is [IUAV University of Venice](#). It is a design-themed university, founded in 1926, focused on teaching, research and practice in the design of living spaces and environments (buildings, cities, landscapes and territory) and in the design of everyday use objects, especially leveraging new technologies.



On the left:
Entrance to the University of Architecture IUAV by Carlo Scarpa
Credits © Jean-Pierre Dalbéra

3.11

In achieving the SDGs, **tradition plays an important role as a source of inspiration**, since creativity finds a reliable support in what society has established in the past as a suitable solution for its development. **Tradition represents the competences and values of a territory**, which endure and are able to flourish again, even after centuries, generating new ideas and opportunities. It represents the frame of reference to provide guidelines about what survived in the economic, social and cultural evolution, therefore encompassing the idea of sustainability. However, this does not mean that tradition should last unchanged. On the contrary, it is an asset in need of continuous exploration and expansion.

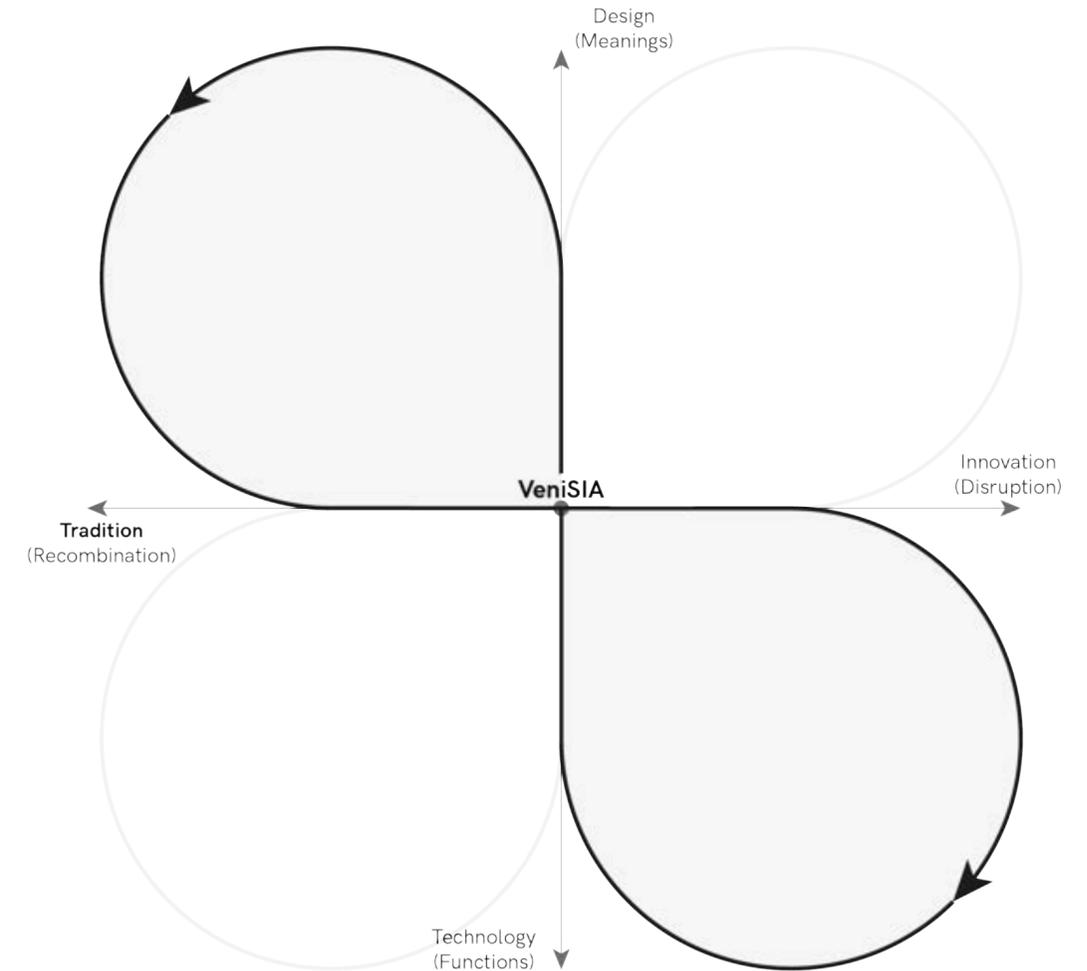
Tradition and innovation complete each other, rather than act as opposite forces: all novelties are a modification of what previously existed, there is persistence within change and vice versa. Thereby, the essential role of past things emerges in the creation of new ones, as well as in the never-ending process of modification

Tradition Recombination

and the mutual influence of old and new. The persistence of the past in the present relies on the combination of existing elements, in order to create something new. Hence, **tradition becomes the wide archive on which future can be built**. New technologies as well must somehow rise from combinations of what already exists.



Right from its founding, Venice is a privileged place to test and experiment: trade, figurative art, cosmetics, accounting, printing, publishing, cinema, music, not to mention lifestyle. An unexpected example of a traditional Venetian tool are high heels, implemented to avoid women from soaking their gowns on muddy streets and later turned into a fashion must, which made Venice the most successful footwear cluster.



On the left:
- Ancient heels, 1400
- Modern heels by René Caovilla, 2000



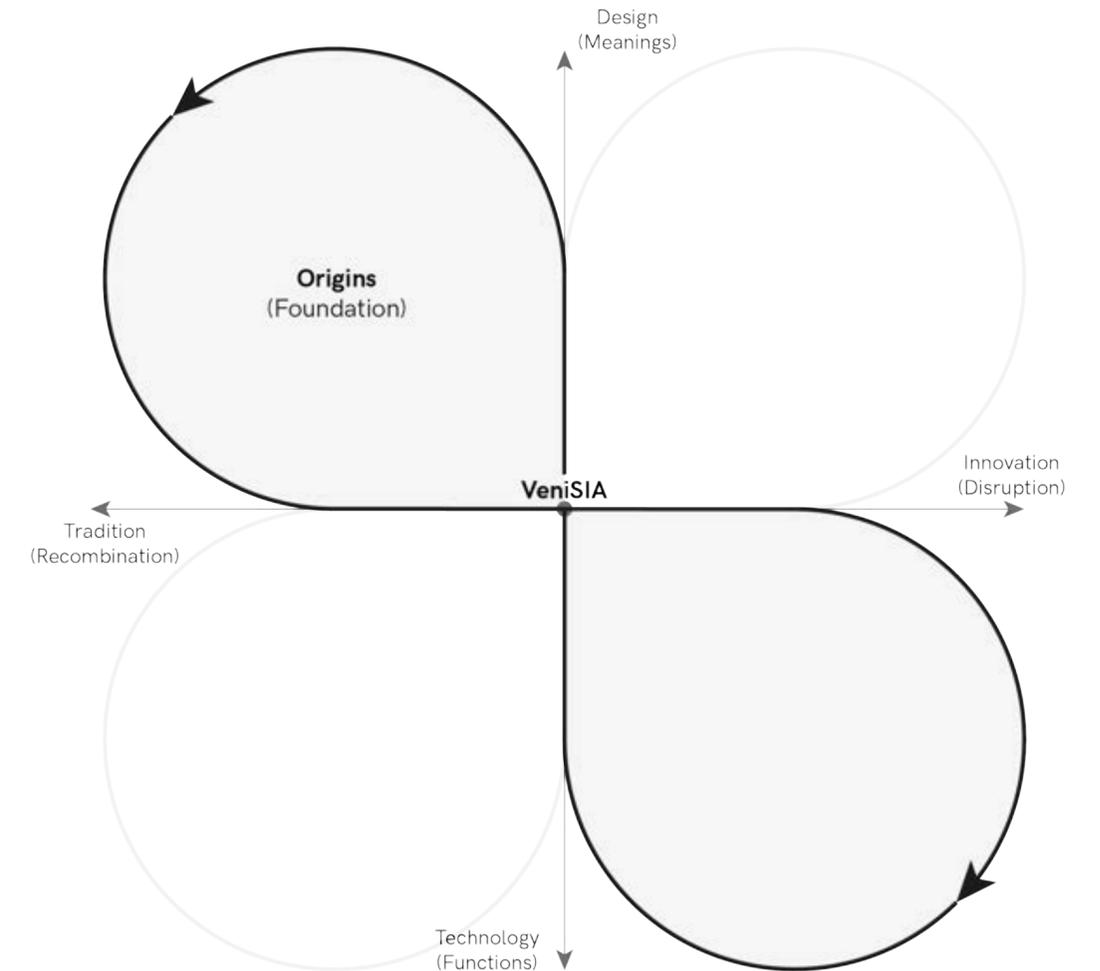
3.12

Origins Foundation

A common theme connects the legendary explorations of Marco Polo to the daring blends of Venetian Renaissance; scholar talks at the Caffè Florian (the second oldest European coffee shop) to the first and most enduring movie festival's films; the Accademia Gallery (the greatest collection of Venetian paintings in the world) to the longest-living republican history. Thus Venice is not only the birthplace of paperbacks (1501), but Venetians were also the first to introduce freedom of expression (1573) and had the first female graduate ever (Elena Cornaro 1679). Modern accounting was developed in Venice by Friar Luca Pacioli (1494) and even the word "quarantine" (meaning "forty days") was refined starting from the 15th century to indicate isolated passengers and cargos from incoming ships. These are only a few examples of the records of such a city, a **leader in multiculturalism and innovation**, which has managed to preserve its memories and timeless beauty.



Above:
Venetian lagoon -
NASA Earth Observatory

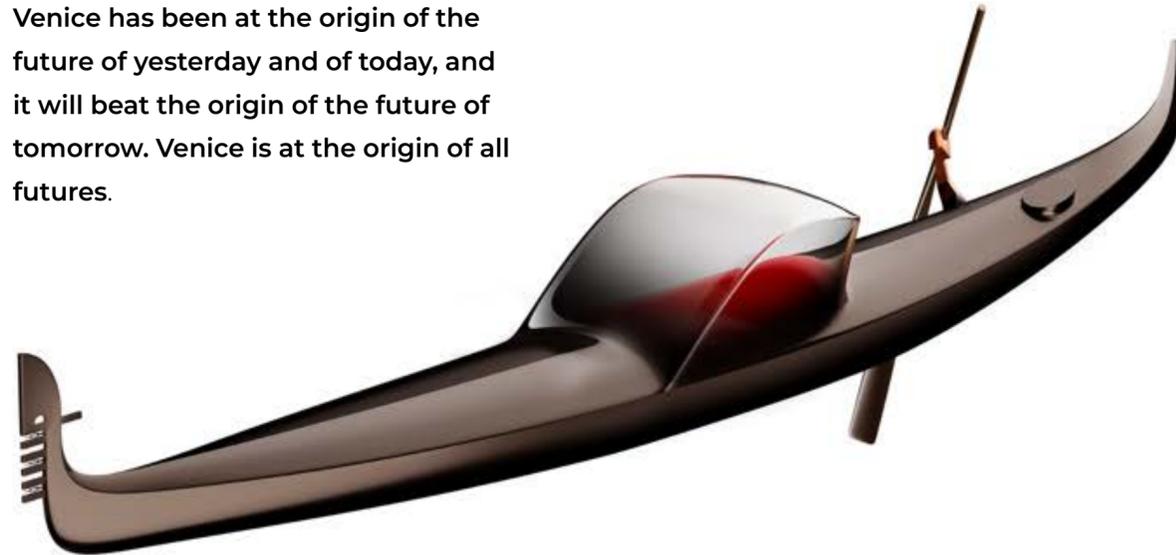


3.13

Organizations and individuals rose up to envision a challenge for the world in 2030.; as Al Gore stated in 2020: “We believe that we’re in the early stages of a sustainability revolution, one that will be larger than the Industrial Revolution with the speed of the digital revolution. We believe it’s the biggest investing opportunity in the history of the world, and the biggest business opportunity in the history of the world.”. Themes include increasing urbanization, growing displacement from conflicts and climate change, almost universal access to internet, end of the internal combustion engine and less resource-intensive food systems. 2020 marks the start of the decade along which humanity has to meet the SDGs. To envision the 2030 world requires to identify available opportunities, but also risks and challenges. However, we know that, if we achieve the SDGs’ vision, our world will be an extremely better place in 2030. VeniSIA’s ambition is to become an important shaper of the future.

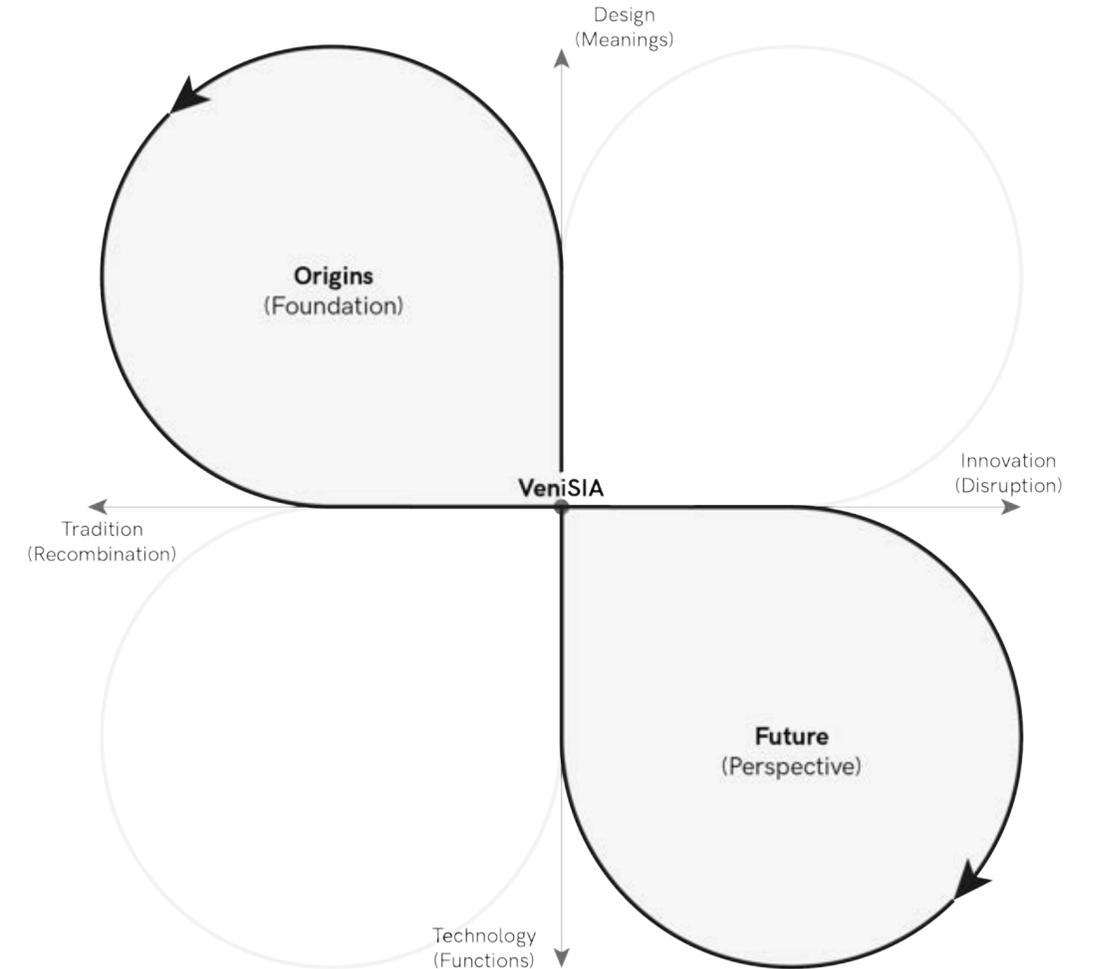
Future Perspective

Venice has been at the origin of the future of yesterday and of today, and it will beat the origin of the future of tomorrow. Venice is at the origin of all futures.



S+ARCK®

Above:
“Dream of Winter Gondola for Venice” realised by Philippe Starck on the occasion of the VI edition of SIF - Strategy Innovation Forum: “The impact of SDGs on business models”, September 2021.





4.1

Activity areas of focus

Illustrative examples

VeniSIA focuses on a series of SDGs and develops a range of ideas and solutions that will be tested in Venice, prove to achieve positive results and finally lead to a start-up.

SDGs' affecting Venice

Venice problems related to the SDGs

Examples of business ideas and technology solutions that could be developed within VeniSIA



7.2 Increase substantially the share of renewable energy in the global energy mix

Due to its unique characteristics, Venice can't have easy access to renewable energies for buildings, mobility, production and commercial activities

- Development of renewable energy technologies specifically designed for Venice historical buildings
- Development of marine-based renewable energy technologies (tidal energy, algae-based fuel, etc.)

7.3 Double the global rate of improvement in energy efficiency

The historical buildings need to be remodeled to reach new energy standards and guarantee higher standards of living

- Development and implementation of building technologies specifically designed for energy efficiency in historical buildings



11.2 Affordable and sustainable transport systems

Mobility in Venice is mostly based on combustion engines "vaporettos" and boats, often overcrowded.
The goods logistics is also totally dependent on combustion engines.
Cargo and cruise ships are one of the biggest source of pollution in the city

- Hydrogen and BEV "vaporettos"
- Construction of hydrogen refueling stations
- Technologies for sustainable mobility on water and land (electric boats and buses, sharing services, etc.)
- Technologies for sustainable logistics (drones, electric vehicles, sail integration and alternative fuels, including hydrogen-powered cargo shipments, cargo and cruise electrification, etc.)
- Implementation of a recharging network for water and inland emobility
- Data-driven transports planning (e.g.: Venice Smart Control Room can make its data available)
- On demand transfer service, which allow limited groups of people to share a boat for a common mobility demand. Service possibly operated via a plan-book-pay app

11.4 Protection of cultural and natural heritage

Venetian buildings, infrastructures and coastal areas (Lido, Pellestrina, etc.) are largely affected by tidal phenomena, erosion and degradation due to marine air

- Digital preservation and physical conservation of the cultural heritage thanks to AI, machine learning and advanced 3D digitalization techniques
- New products and technologies for the protection of buildings and masterpieces from water and salt

11.5 Reduction of the effects of natural disasters

Severe atmosphere events and marine floods have a huge impact on coastal areas and city buildings, causing increasing damages to natural environment and Venetian architectures

- Use of drones to operate in disaster areas
- AI systems for the evaluation of damages , for a faster settlement of claims and for a faster restoration
- Development of natural techniques to prevent and manage natural disasters along the coastal areas of Venice

11.6 Reduction of the environmental impact of cities

Once overtourism will restart, the city will be threatened again by the presence of millions of tourists every year. This has a large impact in terms of pollution of water, air and land

- Technologies for water purification and pollution reduction
- Biobased packaging and other packaging materials for lagoon and land pollution prevention
- New technologies and operational models for a better waste collection and sorting system in Venice



4.1

Activity areas of focus

Illustrative examples

VeniSIA focuses on a series of SDGs and develops a range of ideas and solutions that will be tested in Venice, prove to achieve positive results and finally lead to a start-up.

SDGs' affecting Venice

Venice problems related to the SDGs

Examples of business ideas and technology solutions that could be developed within VeniSIA



12.2 Achieve the sustainable management and efficient use of natural resources

Venice economy is largely depending on a huge amount of natural resources (food, fuel, materials for goods production, buildings remodelling)

- Development of consultancy services to help Venetian enterprises to implement new circular business models, technologies and services

12.3 Reduction of food waste

One of the main attractions of Venice is its cuisine. Hundreds of restaurants and hotels serve thousands of meals every day to millions of people, with a consequent massive waste of food

- Apps to sell surplus food from cafes, restaurants, takeaways and shops, possibly with a discount rate for residents
- AI to plan restaurants' purchases
- AI and digitalization of food supply chain from farm to fork to avoid food waste and overproduction

12.4 Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle

Marghera is a national chemistry cluster with real and potential huge impacts on Venice environment. Such a concentration of people in a small city requires a large use of chemicals for cleanings and washing services. Intensive agriculture to serve food in Venice is another source of chemical pollution affecting its lagoon

- New technologies for Green Chemistry in Marghera
- New technologies to reduce the use of chemicals in agriculture, washing services, cleanings

12.5 Reduction of waste generation

Venice waste collection system is one of the most complex due to: 1) the difficulty to use vehicles 2) the impossibility of installing machineries 3) the huge amount of visitors in the city

- AI robot pickers recognize and extract recyclable items
- Self moving driverless trash bins
- Social enterprises to valorize waste and second hand markets



13.1 Strengthening of resilience and adaptive capacity to climate change

Venice is subjected to sea level rise due to climate change and subsidence. Moreover, heatwaves and increasing temperature can afflict a city with not much space left to increase green coverage

- Satellite data and machine learning to measure the effectiveness of conservation projects
- Big Data modeling and weather forecast improvement to better manage extreme phenomena

14.2 Protection of marine and coastal ecosystems

Sea level rising, severe atmosphere events and marine floods have a huge impact on coastal areas and city buildings, causing increasing damages to natural environment

- Artificial reef construction
- Development of electric port infrastructures & operations



14.4 Sustainable fishing

Fish stocks in the Adriatic Sea are under increasing pressure due to intensive fishing, also by non-EU countries

- Aquaculture technologies (e.g.: sensors, electric underwater autonomous vehicles)
- Seafood traceability
- Development of combined technologies into products, such as aquaculture



4.1

Activity areas of focus

Illustrative examples

VeniSIA focuses on a series of SDGs and develops a range of ideas and solutions that will be tested in Venice, prove to achieve positive results and finally lead to a start-up.

SDGs' affecting Venice

Venice problems related to the SDGs

Examples of business ideas and technology solutions that could be developed within VeniSIA



15.1 By 2030, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2030, protect and prevent the extinction of threatened species

Protracted release of perfluoroalkylidic substances (better known as **Pfas**) polluting tap water in Vicenza, Padua and Verona areas

Venice mainland is one of the Italian areas with the highest values of soil sealing and concentrations of urban areas. Soil sealing causes problems such as nutrient leaching and loss of biodiversity

Loss of flora and fauna on Venice mainland threatens a number of species (e.g.: Scarpetta di Venere, Adonide ricurva, Aquilegia della Majella)

- Foster product and technology innovation to optimize resource efficiency, reduce impacts on ecosystems and lower carbon emissions
- Technological applications that allow to filter freshwater and to reuse it in new production processes

- Scale up best practices for land use planning and management
- Support and apply landscape approaches, based on multistakeholder dialogue and collaborative action, to overcome social and environmental fracture lines in landscapes facing deforestation, land and ecosystem degradation

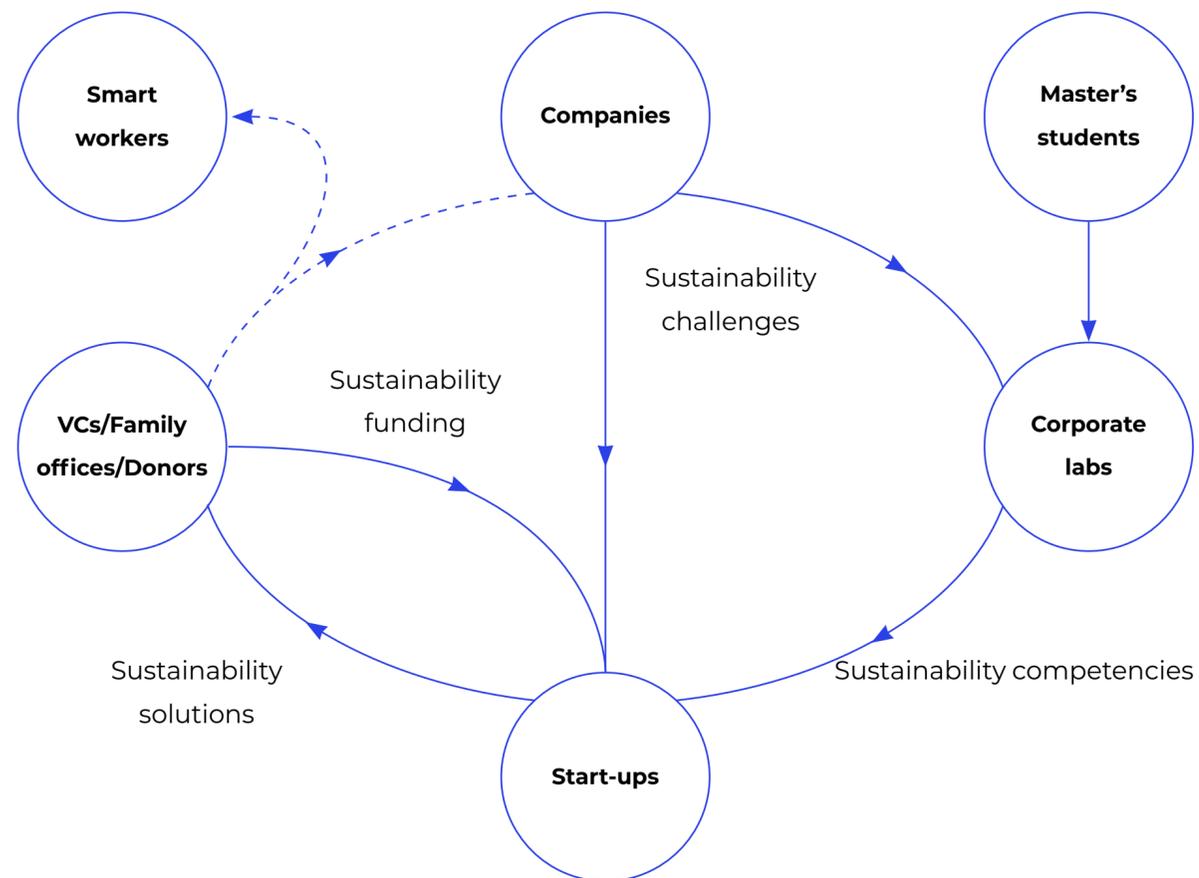
- Flying drones, AI and big data analysis are the tools of conservationists. They can help to monitor species by providing aerial images of large areas that sometimes are difficult to access



4.2

Operating model

The acceleration virtuous circle



SDGs are an urgent call to action for people and planet, and companies are required to innovate their operative and business models through the development and test of new business ideas and technology solutions. VeniSIA copes with the companies' sustainable development challenges through a **virtuous circle of acceleration** where:

- 1. established companies identify their main sustainable development challenges:** VeniSIA supports international and national companies to design a sustainability innovation project, with the aim to develop it;
- 2. most qualified researchers and start-uppers are identified, through an international call to action,** and consequently engaged by VeniSIA to provide business ideas and technology solutions which can result in sustainability innovation projects;

- 3. corporate labs and start-ups are set off in Venice by funding companies, to carry out the sustainability innovation projects:** VeniSIA supports the match between companies and labs/start-ups and accelerates the latter offering a range of services, including training, mentoring, project management, business model redesigning, co-working, accommodation, etc.;

- 4. master's students get internships within the corporate labs:** VeniSIA supports companies to select the best master's students from (not only) Ca' Foscari University for an internship in the corporate labs in order to support the sustainability innovation projects;
- 5. VCs, family offices and donors join VeniSIA and create new market spaces for successful sustainability innovation projects:** VeniSIA supports the promotion of tested business ideas and technology solutions among international investors and VCs to further fund selected start-ups and unlock their commercial opportunities;

- 6. additional companies are attracted** by the latter to cope with sustainability challenges and test in Venice ideas and solutions which can later work elsewhere in the world;

- 7. additional independent smart workers join Venice:** VeniSIA establishes and manage a community of innovators, able to attract worldwide smart workers, interested in a unique living and working experience in Venice. VeniSIA copes with broader sustainable development challenges through the same acceleration process where start-ups are funded by donors/sponsors.

4.2 Operating model

Corporate accelerator programs

CLIMATE CHANGE & CIRCULAR ECONOMY

| Stakeholders | International sustainability solution <i>Supporters</i> | International & national sustainability solution <i>Providers</i> | National sustainability solution <i>Seekers</i> | |
|---------------------|---|--|--|---|
| Addressed needs | Solution to one of Venice sustainability challenges | Solution to a broad sustainability challenge, leveraging Venice as a city lab or a showroom for business opportunities | Solution to a corporate sustainability challenge, leveraging Venice as a city lab or a showroom for business opportunities | Inclusion of sustainability in the corporate strategic plan |
| Developed solutions | Co-Innovation | | Open Innovation | |
| | | | Start-up Scouting | Corporate Lab |
| Programs | Launch of an acceleration program including the following phases: 1. Call & Pre-Selection 2. Education & Selection 3. Pre-Acceleration & Final Selection 4. Acceleration & Demo Day | | Launch of an acceleration program including the following phases: 1. Call & Selection 2. Acceleration | Creation of a customized Research Lab including the following phases: 1. Researchers scouting 2. Training of employees 3. Problem analysis 4. Technology scouting 5. Development of a solution |
| Outcomes | W1. Brand awareness | 1. Brand awareness 2. Business opportunity 3. VC | 1. Brand awareness 2. Solution to a sustainability challenge 3. Business opportunity 4. VC | 1. Brand awareness 2. Solution to a sustainability challenge 3. Business opportunity |



4.3

Co-Innovation program Overview

CLIMATE CHANGE & CIRCULAR ECONOMY

Description

Matching between Late-Stage Start-ups/SMEs/Scale-ups and Corporates

Partners



Timing

12 months/1 program p/year

Verticals

Climate Change & Circular Economy consistently with the addressed needs of the corporate Partners

Key numbers

500 scouted start-ups p/Partner
100 pre-selected start-ups p/Partner
10 selected start-ups p/Partner to enter the program
1 selected start-up p/Partner for Pilot/POC

Investments

Program funded by corporates
 Final Demo Day for investors, corporates and SMEs

4.3

**Co-Innovation program
Phases**

Phase 1 to Phase 5 > 12 months
(January 2022 – December 2022).

* Number of start-ups p/Partner

| Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5 |
|--|--|---|--|------------------------------|
| Scouting | Pre-Selection | Selection | Co-Innovation | Demo Day |
| 3 months/~500 start-ups* | 3 months/~100 startups* | 2 months/~10 start-ups* | 3 months/~1 start-up* | 1 day/All selected start-ups |
| Launch of global open call for start-ups | Face to face interviews & start-up pre-selection for phase 3 | Business case development & selection for phase 4 | Pilot/POC between start-ups & corporates | Demo Day & Awards Ceremony |

4.3

Co-Innovation program Phase 1 to 5

| Phase 1 - 3 months | Phase 2 - 3 months | Phase 3 - 2 months | Phase 4 - 3 months | Phase 5 - 1 months |
|--|---|--|---|--|
| <p style="text-align: center;">Scouting</p> <p>Launch of global open call for start-ups (~500 start-ups/Partner)</p> <ul style="list-style-type: none"> • Kick off (online event) • Active Scouting • Applications <ul style="list-style-type: none"> - Via VeniSIA Website - Via Partners - Others | <p style="text-align: center;">Pre-Selection</p> <ol style="list-style-type: none"> 1. Pre-screening (~500 start-ups/Partner) 2. Face to Face interview (~200 start-ups/Partner) <ul style="list-style-type: none"> - Assessment of technology solutions & business ideas - Info collection (Video Pitch, Pitch Deck, Investments, Phase, TRL, Patents, Tracttion, etc.) - Collaboration ideas with Venice - Collaboration ideas with VeniSIA's Partners 3. Pre-selection for Partners (~100 start-ups/Partner) 4. Selection for the program (~10 start-ups/Partner); selection by VeniSIA & Partners 5. Legal admission to phase 3 | <p style="text-align: center;">Selection</p> <ol style="list-style-type: none"> 1. Presentation of the program to Start-ups, Investors, Mentors, Partners & SMEs (online event) 2. Matching between start-ups and Project Managers 3. Restricted Demo Day (Corporates, Mentors, Investors, SMEs) 4. Video-calls scheduling 5. Business case - Phase 1 (Problem – Options – Solution) 6. Networking Development 7. Selection for the Pilot/POC (~1 start-up p/Partner) by VeniSIA & Partners | <p style="text-align: center;">Co-Innovation</p> <ol style="list-style-type: none"> 1. Business Case - Phase 2 <ul style="list-style-type: none"> • Business model • Business case validation 2. Business Case - Phase 3 <ul style="list-style-type: none"> • Pilot/POC with Partners | <p style="text-align: center;">Demo Day</p> <ol style="list-style-type: none"> 1. Demo Day <ul style="list-style-type: none"> • Global Demo Day (VeniSIA, Partners, SMEs, Investors, Mentors) 2. Awards Ceremony (sponsored) <ul style="list-style-type: none"> • Digital Marketing • Business Model • Sustainability • Legal • Best Innovation |



4.4

Corporate Benefits Main Partner

Partnership fee
€ 200,000 p/program

- 6
 N° of challenges selected
- 1
 N° of members in the Evaluation board
- 10
 N° of start-up chosen (in the Pre-Selection Phase)
- 1
 N° of start-up chosen (in the Pre-Acceleration & Final Selection Phase)
- 2
 Ad-hoc events for corporate Partners @ VeniSIA-Ca' Foscari sites

- +
 Full access to start-up documents
- +
 Corporate Project Manager inclusion
- +
 Intrapreneur in Residence
- +
 Engagement with start-ups included in the program
- +
 Participation to final "Demo Day"
- +
 Corporate-VeniSIA shared communication activities
- +
 Corporate-VeniSIA shared communication activities
- +
 Placement in "Partners" section on website



4.4

Corporate Benefits Premium Partner

Partnership fee
€ 100,000 p/program

- 3
N° of challenges selected
- 1
N° of members in the Evaluation board
- 8
N° of start-up chosen (in the Pre-Selection Phase)
- 1
N° of start-up chosen (in the Pre-Acceleration & Final Selection Phase)
- 1
Ad-hoc events for corporate Partners @ VeniSIA-Ca' Foscari sites

- +
Full access to start-up documents
- +
Corporate Project Manager inclusion
- +
Intrapreneur in Residence
- +
Engagement with start-ups included in the program
- +
Participation to final "Demo Day"
- +
Corporate-VeniSIA shared communication activities
- +
Corporate-VeniSIA shared communication activities
- +
Placement in "Partners" section on website



4.4

Corporate Benefits Core Partner

Partnership fee
€ 50,000 p/program

1 N° of challenges selected

1 N° of members in the Evaluation board

5 N° of start-up chosen
(in the Pre-Selection Phase)

1 N° of start-up chosen
(in the Pre-Acceleration & Final Selection Phase)

+ Full access to start-up documents

+ Corporate Project Manager inclusion

+ Intrapreneur in Residence

+ Engagement with start-ups included in the program

+ Participation to final "Demo Day"

+ Corporate-VeniSIA shared communication activities

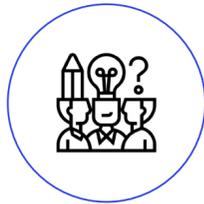
+ Corporate-VeniSIA shared communication activities

+ Placement in "Partners" section on website

4.5

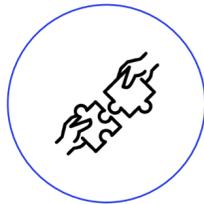
2021 edition

Corporate accelerator



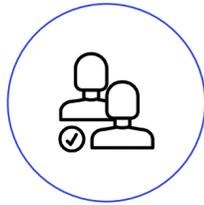
2

Focuses on Climate Change & Circular Economy



3

Partnerships with



21M+

Engaged people through media relations



1

Annual Event



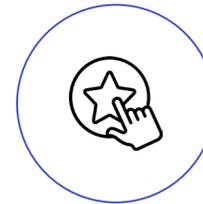
100+

Mentors



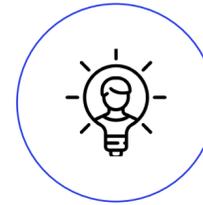
1513

Applications received



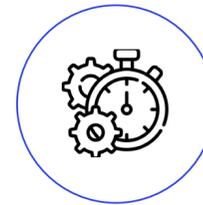
250+

Pre-selected Start-ups



31

Selected Start-ups



10

Pre-accelerated Start-ups



3

Accelerated Start-ups

4.5

2021 edition Brand communication

Data

162

Published articles

107

Involved newspapers

5

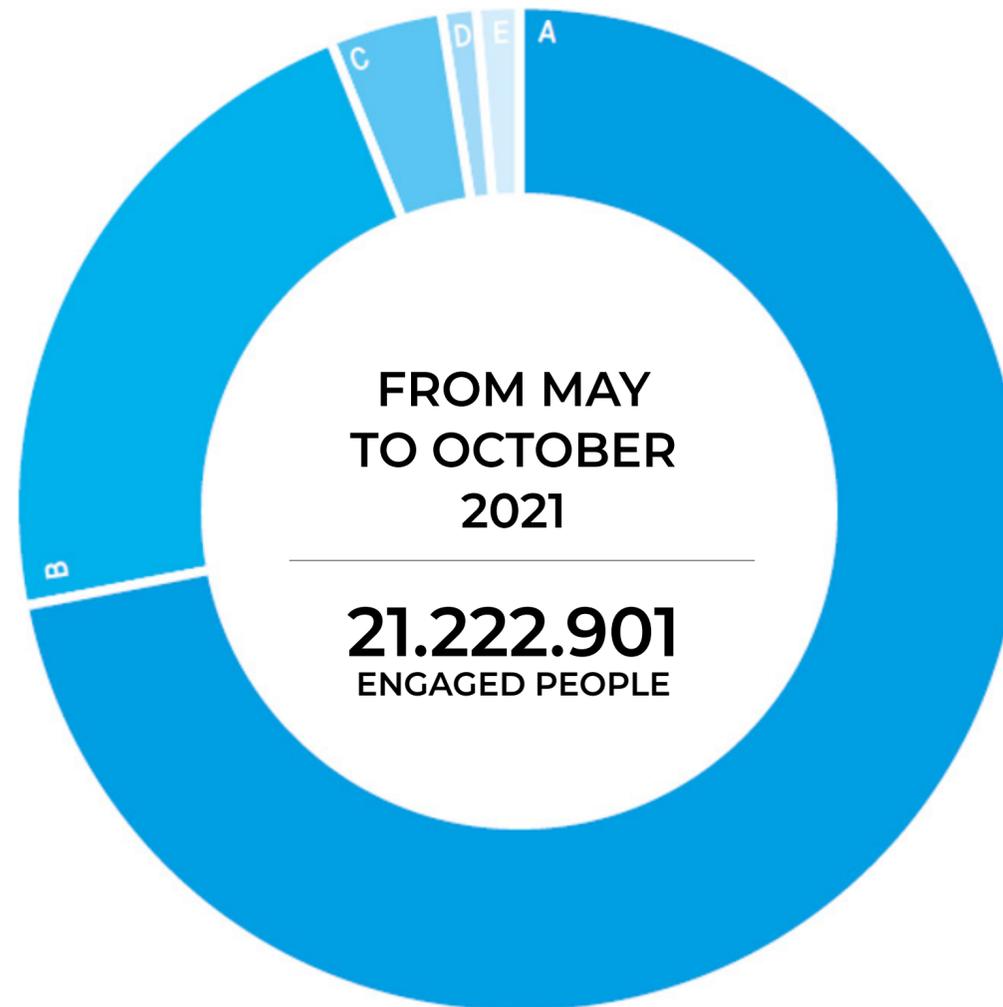
Press releases

2000+

Followers

 @VeniSIAccelerator

 @JoinVeniSIA



Legend

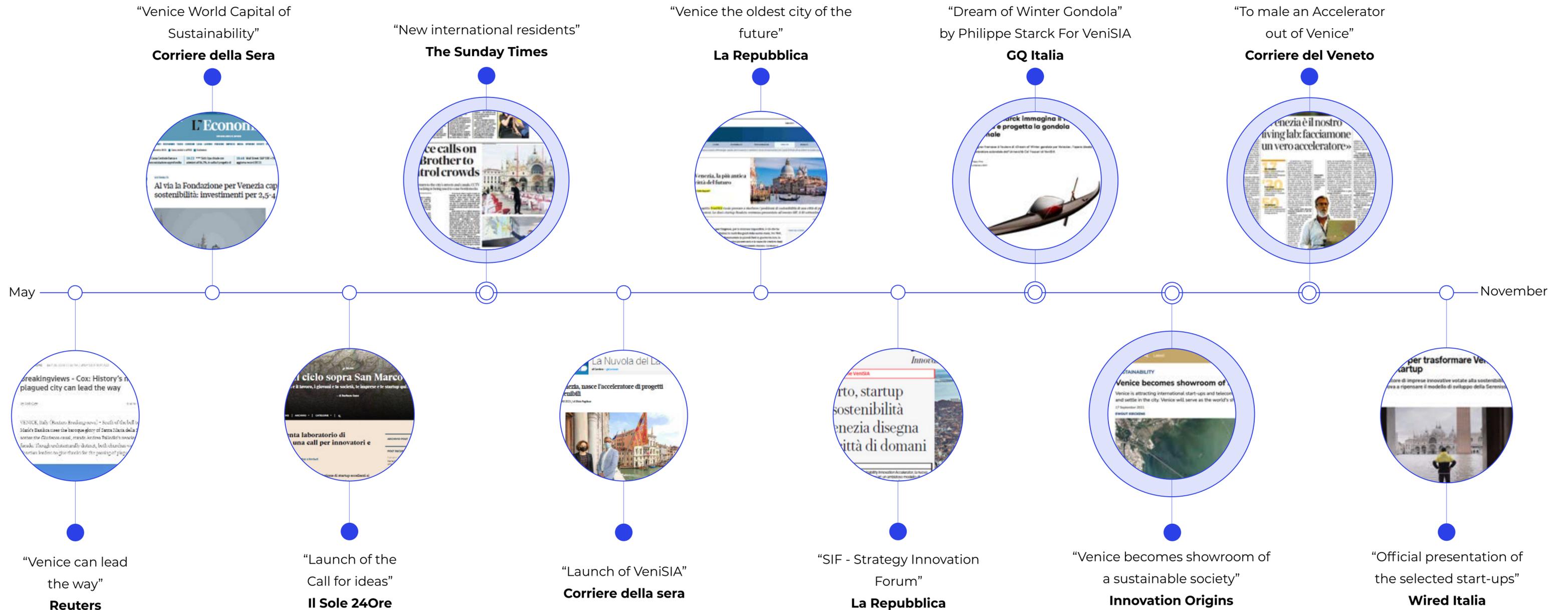
| | |
|----------------|-----|
| A. Web | 119 |
| B. Print Media | 37 |
| C. Agencies | 4 |
| D. TV | 1 |
| E. Radio | 1 |

| | |
|--------------|-------------------|
| TOTAL | 162 |
| REACH | 21.222.901 |



4.5

2021 edition Press activities





4.5

2021 edition Events



4.5

2021 edition Student engagement

133

Ca' Foscari Students

Developing **entrepreneurial projects** within VeniSIA, focused on:

- ➔ the analysis of the **socio-environmental** problems of Venice
- ➔ the implementation of **business** ideas to meet the SDGs

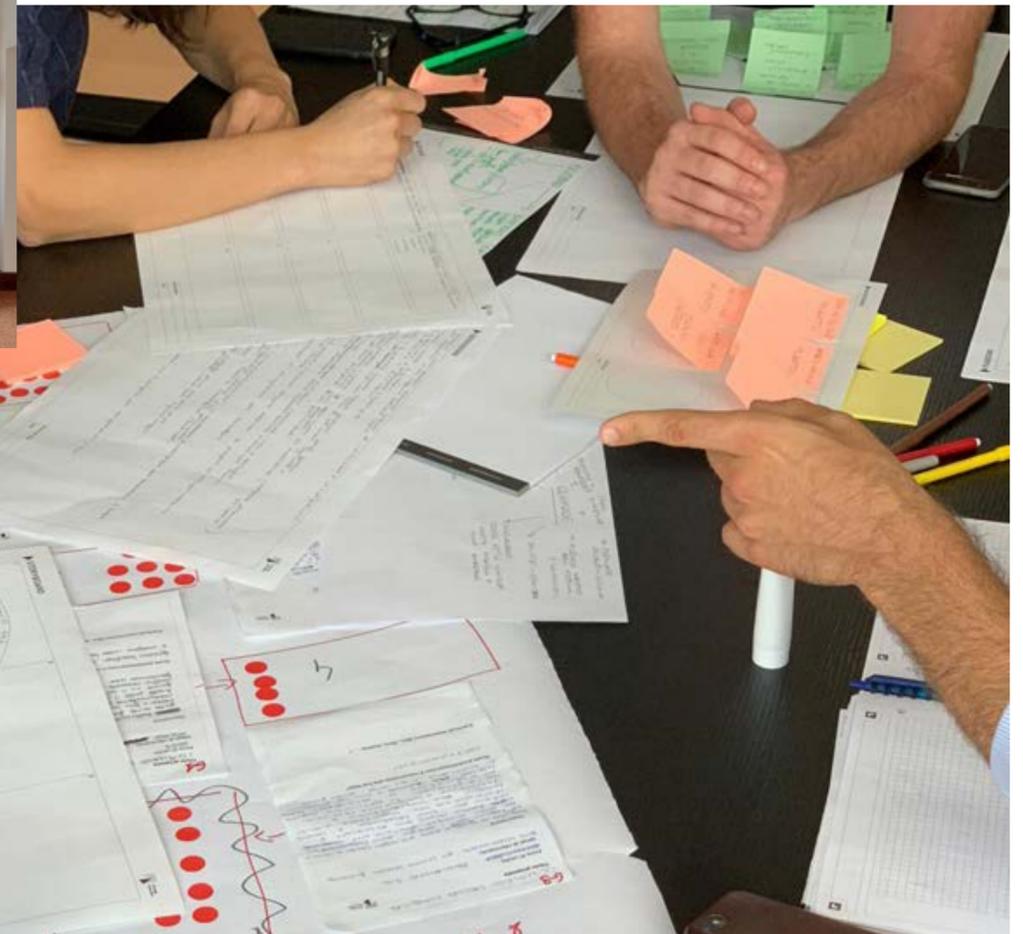
92

Developing **entrepreneurial projects** within VeniSIA, focused on **cultural heritage-driven** innovation

36

Selected to **support VeniSIA's winning start-ups** along the Co-Innovation phase

5

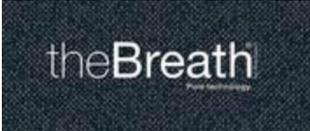


Below:
- VeniSIA staff at Ca' Foscari University of Venice - Aula Baratto
- Students participating at Strategy Innovation's workshops



4.5

2021 edition
Selected start-ups

| | | | | | | | |
|---|---|--|---|---|---|---|---|
| <p>2021 Selected start-ups</p> |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |



4.5

2021 edition

Accelerated start-ups I

CarboRem

CarboREM designs and builds innovative industrial plants for recovering biogas and useful materials (like phosphorus) from sewage sludge, digestate and organic waste (e.g. organic fraction of municipal solid waste, agro-food waste).

CarboREM, that means **R**ecovering of **E**nergy and **M**aterials, permits to reduce the total cost of disposal in term of less volume treated and less transport of water, meanwhile contributing to increase energy efficiency and CO2 reduction.

They provide a technology based on an innovative process that transform waste into a liquid usable for biogas production or into a sterilized solid that can be used as a soil improver or as a biofuel in existing plant

Waste Management

Trento





4.5

2021 edition

Accelerated start-ups II

9-Tech

9-Tech is a team of engineers and researchers that develops new technologies for circular economy and especially for the recovery of strategic metals from electronic waste.

The start-up, founded in 2020, is not only focused on the research of the processes, but also on the design and realization of pilot plants to validate them for industrialization.

The main project is 9PV: an efficient plant for the recovery of glass, aluminum, metallic silicon, copper and silver from end-of-life PV panels. 9PV will avoid the loss of important resource contained in PV panels that allowing their re-use for new productions.

Circular Economy

Venezia



4.5

2021 edition

Accelerated start-ups III

Radoff

Radoff is an innovative start-up that developed Radoff LIFE, a device born with the goal of breaking down the risks generated by Radon, a radioactive gas, cleaning up the air we breathe every day at home and in workplaces.

The technology provides an innovative mechanisms to monitors and cleans domestic air by acting automatically, without requiring expensive repaving interventions.

A challenge that also has a social value because the gas is classified as a Grade 1 Human Carcinogen and it's the second cause of lung cancer. Their goal is to eliminate radon gas in buildings to improve the life of people.

Air Pollution

Bologna





4.5

2021 edition

Accelerated start-ups IV

Crafted

Crafted is a digital production hub located in Venice: it provides its clients with high quality digital marketing campaigns, thanks to an interdisciplinary team specialised in IT, data engineering, e-commerce and visual design.

The team's goal is to innovate through tradition, because Crafted believes there is no innovation without strong foundations able to improve and enhance it.

Crafted developed a platform call Rio to deliver efficiency and transparency and provide its clients with full control over the entire digital marketing campaign process.

Digital Communication

Venezia



4.6

Stakeholders VeniSIA's ecosystem

VeniSIA will leverage a strong ecosystem to design and execute a complex system strategy, so that innovation success with key partners sets in motion a chain of success that is transmitted to the other partners in the ecosystem, **for the ultimate benefit of the ecosystem as a whole.**

Academic ecosystem

- 1. Ca' Foscari University of Venice
- 2. International Universities' ecosystem

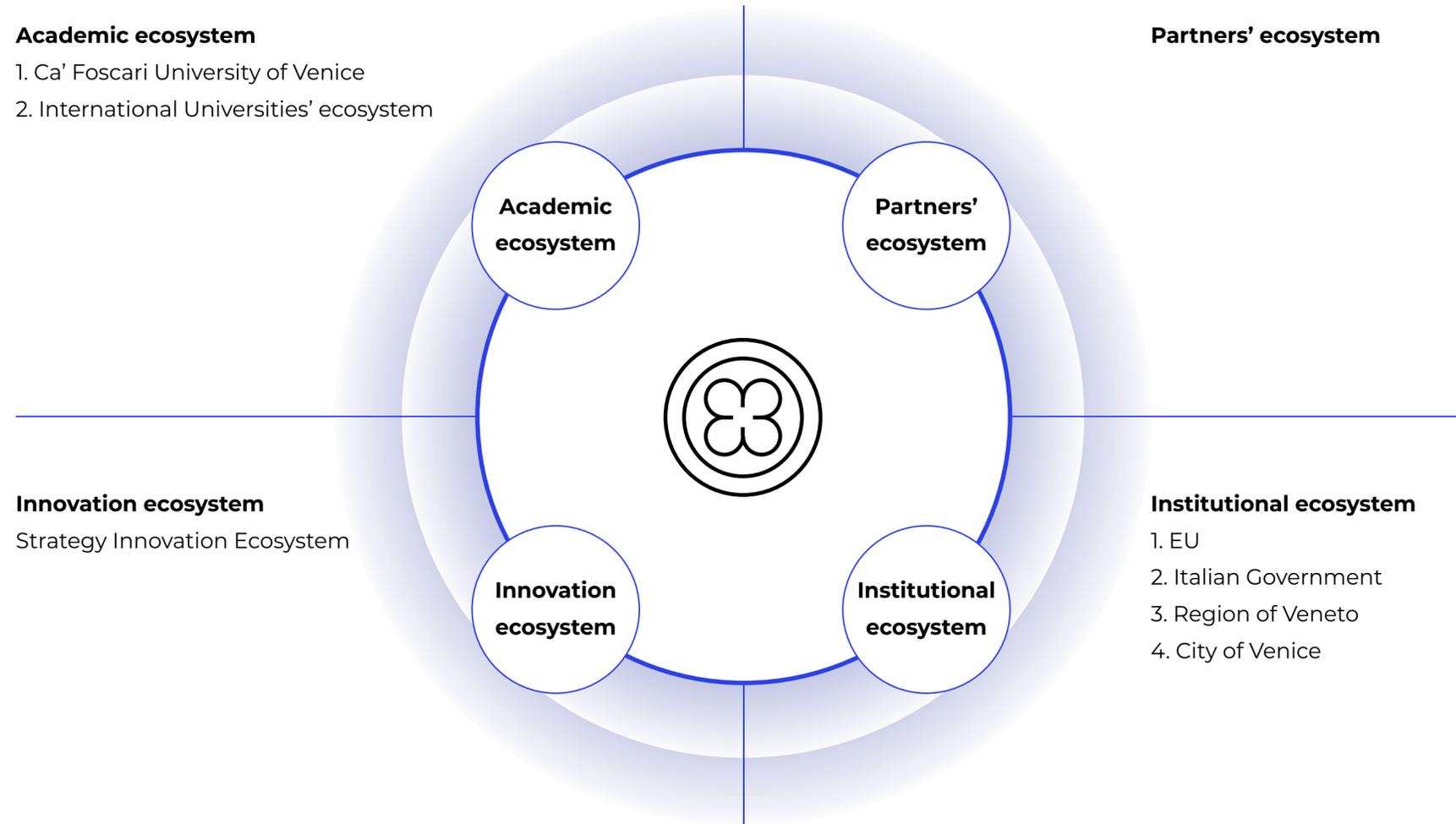
Partners' ecosystem

Innovation ecosystem

Strategy Innovation Ecosystem

Institutional ecosystem

- 1. EU
- 2. Italian Government
- 3. Region of Veneto
- 4. City of Venice





4.7

VeniSIA draws on a strong and well established academic and innovation ecosystem led by [Ca' Foscari University of Venice](#). Founded in 1868, the first-of-its-kind business school in Italy and the second in Europe, Ca' Foscari University's seat has always been the Foscari's stunning Gothic palace located on the Grand Canal.

Ca' Foscari University is one of the top universities in the nation and offers a wide range of degrees in the humanities and sciences. Together with cutting-edge facilities, an international reputation and high graduate employment rates, it also gives students a stimulating lifestyle in a truly inspiring location.

Ca' Foscari's mission is to facilitate and produce innovative and impactful researches across the entire spectrum of its disciplines that addresses questions of global importance.

Dedicated to fostering a multi- and intercultural outlook, it strives to provide

Academic ecosystem The keystone actor

students with a transformative learning experience. Moving forward, **Ca' Foscari will continue to leverage its academic excellences** and cultural contributions in order to forge ever closer and more meaningful ties to its rich network of local, national and international communities.

Ca' Foscari is a top ranked university that inspires researchers and students to become game-changers in their fields and to make a genuine difference in the world. It has eight departments:

- Department of Economics
- Department of Management
- Department of Environmental Sciences, Informatics and Statistics - the first department of environmental sciences in Italy
- Department of Asian and North African Studies
- Department of Linguistics and Comparative Cultural Studies
- Department of Molecular Sciences and Nanosystems
- Department of Philosophy and Cultural Heritage
- Department of Humanities

Ca' Foscari University Foundation is the most important innovation hub of the Venetian industrial district. Ca' Foscari University Foundation has established partnerships with thousands of SMEs and with almost all the multinational companies located in the area (e.g.: SAVE, Assicurazioni Generali, Intesa Sanpaolo, Eni, Snam, Saipem, Cassa Depositi e Prestiti, Zignago Holding, De'Longhi, TIM, Enel, Luxottica, Stevanato Group).



Above:
- Ca' Foscari University of Venice - headquarter
View from Aula Baratto and its Quadrilobes

On the left:
- Ca' Foscari University of Venice - facade
View of the Grand Canal



4.8

Innovation ecosystem

Strategy Innovation Ecosystem

The [Economic Campus of Ca' Foscari University](#) is the keystone actor of the most important strategy innovation ecosystem in Italy. Among the several strategy innovation projects developed:

- **SIL, Strategy Innovation Lab:** a digital transformation laboratory founded by the two universities located in Venice historic center (Ca' Foscari and IUAV). Its focus is on supporting national and international incumbent companies in product design, based on digital first but human centered;
- **SIH, Strategy Innovation Hub:** an innovative space collaborating with some multinational companies (e.g.: Intesa Sanpaolo, KPMG, Cisco, Sharp, Axians, De' Longhi, Arper, Foscari), with a charming conference room, equipped with the latest technologies. It serves as a platform for dialogue and collaboration to support the networking activities of SIC (Strategy Innovation Community) which involves more than 2.000 companies;
- **SIF, Strategy Innovation Forum:** the largest Italian strategy innovation think tank of entrepreneurs, managers, experts, academics and policy makers who take part in SIC to develop knowledge and create networks for the transformation of the economic system. The focus of the 5th edition of SIF was the impact of AI and Blockchain on business models: 50 partners (e.g.: Siemens, Engineering, Acqua Minerale San Benedetto, Santa Margherita), 100 speakers and 1.500 attendees;
- **SIW, Strategy Innovation Workshop:** smaller events for the SIC, focused on selected strategic topics and mainly related to digital & technology trends, social & environmental trends and cross-cultural trends;
- **SIM, Strategy Innovation Master:** an executive part-time master focused on front-end innovation. SIM explores all the business model innovation sources, namely market pull, design-driven and technology push, with the ambition to create a real start-up by the end of the master. SIM is supported by several companies (e.g.: Crédit Agricole, OVS, Superjet International, ABS, Nice).

A Strategy Innovation Accelerator, specifically a sustainability one, is the missing project to support a new era in which civil society, governments, the scientific community, policy makers and business work together relentlessly towards a more equitable, prosperous and sustainable world.



On the right:
Section of Venice map and a view of the lagoon and of the SIH

1 - Ca' Foscari University Economic Campus
A - VeniSIA @ SIH
B - Student housing (250 pax)

Photo by Marco Zanta



4.9

Business ecosystem Private actors

VeniSIA rises in a considerable business ecosystem. While start-ups have the leading role in the acceleration process, the backing of partners has the key role for feasibility.

VeniSIA promotes a wide range of business opportunities and collaboration options, involving different private and public partners located both in Venice and worldwide.

Business community

- **Firms:** mestablished companies willing to match with VeniSIA start-ups in order to recast or improve their business model by exploiting the SDGs as the driving force for innovation and value, and by maximizing the potential of their distinctive know-how and manufacturing competencies. Partner companies are mostly (but not only) located in Venice metropolitan area. In fact, the need to meet sustainable and SDGs-driven business models is crucial for the ecosystem of local companies, which generate a value-added of €143.8B and an export value of €61.6B, resulting in a positive trade balance of €15.4B. The most important industries are: mechanical, agrifood, eyewear and biomedical, leather, electronic and appliances. Tourism is also a key industry with 69.2M of presences, including 47.1M foreigners.

- **Investors:** companies, VCs or individuals invest in VeniSIA's business ideas and technology solutions. The promotion is targeted to investors in order to unlock VeniSIA's commercial opportunities. Investors, influenced by location, the timeline of their funds, their interest and expertise in a certain field, are great allies in taking the start-ups to the next level of growth.

Supporters

- **Sponsors:** foundations, trade associations, chambers of commerce and other private organizations keen to offer a contribution to VeniSIA. The contribution could be either direct funding and in-kind donations, including access to networks, mentoring, tutoring (e.g.: chambers of commerce of the metropolitan area can share their network, mentorship on

vertical topics or fund those start-ups which match their associates' topics). [Venice Foundation](#), a bank foundation, established a fund in November 2019 for the safeguard of Venice heritage against floods. [Confindustria Veneto's](#) training subsidiary, SIAV can help with mentoring and involvement of local companies.

- **Donors:** individuals or companies willing to offer financial support to VeniSIA's social or technology mission without a direct ROI. Benefits are the sharing of such relevant targets and of SDGs- driven business models. Additional benefits include the use of VeniSIA's premises and awards and acknowledgements from Venice universities.

- **Mentors:** most welcome mentors are Venetians living abroad and devoted to support the future of Venice and retired top managers interested in providing competences for the start-ups involved in the project.



On the right:
Photo by Gryffyn on Unsplash.com



4.10

Institutional stakeholders

Public organizations



Ursula von der Leyen
President of the European Commission
Speech at the European Parliament
Plenary Session
Strasbourg, 27 November 2019

"If there is one area where the world needs our leadership, it is on protecting our climate. This is an existential issue for Europe – and for the world. ... How can it not be existential when we see Venice under water, Portugal's forests on fire, or Lithuania's harvests cut by half because of droughts? This has happened before but never with the same frequency or intensity. We do not have a moment to waste. The faster Europe moves, the greater the advantage will be for our citizens, our competitiveness and our prosperity. The European Green Deal is a must for the health of our planet and our people – and for our economy. The European Green Deal is our new growth strategy. It will help us cut emissions while creating jobs. At the core of it will be an industrial strategy that enables our businesses – big and small – to innovate and to develop new technologies while creating new markets. We will be global standard setters. This is our competitive advantage. And the best way to ensure a level-playing field. It is a generational transition towards climate neutrality by mid-century. It will need massive investment in innovation, research, infrastructure, housing, and the training of people. It will require public and private investments – at the European and national levels. And once again Europe is already leading the way. The European Union will mainstream climate financing throughout its budget, but also throughout capital markets and the entire investment chain. In regions that will have to make a bigger step than most, we will support people and businesses with a targeted just transition mechanism. It will cut across different funds and instruments and attract the private investment we need. To help us achieve this, the European Investment Bank will be a trusted partner. I am particularly happy with the progress it has made to strengthen its role as EU climate bank. This will boost investment in European technologies and the solutions the world is looking for."

Authorities

Institutions to be engaged:

- **the European Union** has the ambition to become the first climate-neutral continent through the implementation of its roadmap "[European Green Deal](#)". EU offers wide financial support to companies and research bodies interested in developing new technologies to address climate change and other environmental challenges. For instance, the European Innovation Council is launching a group of calls focused on global emergencies (such as the Covid-19 pandemic, but also on the Green Deal). Specifically, SME instrument will address SMEs and start-ups with radically innovative marketable ideas, with the aim of accelerating their scaling-up on European and global markets.
- **the Italian Government** already defined a *Memorandum of Understanding* for the improvement of air quality and a national air pollution control program in coordination with regional governments.

Moreover, through the 2019 Budget Act, the Italian Government financed the creation of the [Venice International Climate Change Center](#), a partnership among Ca' Foscari University, IUAV University and Corila.

Engaged institutions:

- **the Region of Veneto** already supports pollution control by exploiting national and EU funds. Calls are frequent on projects related to axes 1 and 4 of the POR FESR program, focused on research, development and innovation and on energy sustainability and environmental quality. It further adopted a sustainable growth and promoted resource efficiency and a greener competitive economy as a key Smart Specialization of RIS3 guidelines. A *Memorandum of Understanding* among Ca' Foscari University of Venice, VeniSIA and the Region of Veneto has been signed in June 2020 to join "[Veneto Sostenibile](#)", the sustainability strategy of the Region of Veneto to foster sustainability in the Veneto area.

- **the City of Venice** already earned funds from the National Operational Program Metropolitan Cities 2014-2020 to enhance urban sustainability. Specifically, it implemented a Smart Control Room where technologies for tourism monitoring, traffic optimization and pollution control are adopted to enhance the quality of life in the metropolitan area and in the historic center of Venice. VeniSIA supports the innovation of Venice and has submitted an operational plan to the City of Venice for the use of Fabbrica H3 location on the Giudecca Island.



4.11

Location

Venice area

Venice is the capital of north-east Italy, among the most innovative manufacturing regions in Europe, where a network of SMEs is able to produce anything. Nine universities are located in this area, including the University of Padua, which is one of the oldest universities (founded in 1222). This makes Venice **a center of attraction for international researchers and students**, especially for those from the closest areas of Asia and North Africa.

Venice has multiple international transport hubs:

- **Venice airport** (15 mins by car) hands almost 12M passengers p/year making it the fourth-busiest airport in Italy with flights to European metropolitan areas and to the United States, Canada, South Korea and the Middle East. An additional airport hands 3M passengers p/year and mostly serves low-cost airlines.
- Distances: Paris - 1,5h; London - 2h; Moscow - 3h.
- **Venice port** (walking distance) is at the intersection of the European transport corridors. 7 commercial terminals, 16 privately-owned terminals and 10 passenger terminals.
- **Venice highway** (10 mins by car) is known as the Serenissima and stretches from Turin to Trieste. As it runs through the whole highly industrialized Po Valley, it is one of the busiest in Italy.
- Distances: Milan - 2,5h; Rome - 3,5h.
- **Venice train station** (walking distance) is the most important one in north-east Italy. High-speed trains connect Venice to all main Italian cities and to European capitals.

Home of the relatively small community of residents in the historic city center, Venice also nurtures a dynamic network of innovators and entrepreneurs that, together with the **wide community of its universities, research centers and cultural institutes** permeate the city's metropolitan area on the lagoon and on the mainland. One secure initial location will host VeniSIA at his early stage, a mix of active and unused spaces in the historic center of Venice and at an easy reach from main transport hubs. Three potential additional locations are taken into account to further enlarge VeniSIA's sites, in need for recovery to provide the best possible environment for a new use.



On the right:
World map and tag of where Venice is located



On the right:
Map of Venice
1 - Ca' Foscari University
Economic Campus
A - VeniSIA @ SIH
B - Student housing (250 pax)
2 - Venice train station
3 - Venice port



4.12

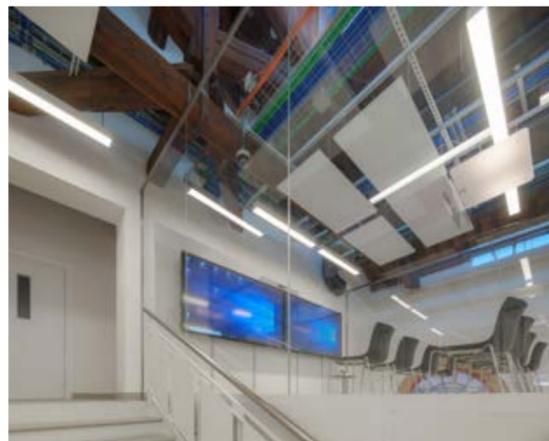
The **Strategy Innovation Hub** is located between land and water and represents the physical and virtual meeting place of a **community of entrepreneurs and managers** who imagine innovative strategic solutions, inspired by training sessions, seminars and workshops, drawing on the research activities and intellectual assets of Ca' Foscari University of Venice.

It is based in Venice, ever since a privileged place for experimentation and contamination, at the **M. Rispoli Research and Innovation Hub of the San Giobbe Economic Campus**, the oldest Italian "business school".

Headquarter Strategy Innovation Hub

The Strategy Innovation Hub is a **physical and intellectual bridge** able to inspire the generation and sharing of new ideas to transform them into radical technological solutions and successful business models.

It is also home to innovative **educational and research activities** involving students, professors and researchers who work in a centre of excellence which inspires sharing, innovation and creativity, and fosters the creation of strategic relationships.



Above:
- Interiors of SIH
Section of Venice map
1 - Ca' Foscari University Economic Campus
A - VeniSIA @ SIH
B - Student housing (250 pax)

Photos by Marco zanta





4.13

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4.14

Call to action

What you can do for VeniSIA

Corporation

- Participate in the project as an investor.
- Express interest and plan a corporate lab or a collaboration with a start-up @ VeniSIA, covering the project's costs (including VeniSIA services).

Donors, sponsors

- Explore other forms of collaboration with VeniSIA and Fondazione Università Ca' Foscari (e.g.: location, housing).
- Support VeniSIA by making a donation or agreeing to provide services.

Start-ups and researchers

- Respond to call to action events and provide technology solutions to given problems of Venice environment.

Students

- Contribute to augment the number of Venice residents during your internship @ VeniSIA's corporate labs or start-ups.

Supporters

- Provide public support to the launch of VeniSIA.

Mentors

- Provide support to the start-ups. Most welcome mentors are Venetians living abroad and retired top managers keen on giving back for the future of Venice.



5.1

VeniSIA

Epilogue

“But, my dear fellow, nothing in the world
that ever you have heard of Venice,
is equal to the magnificent and stupendous reality.
The wildest visions of the Arabian Nights are nothing to the piazza of Saint Mark,
and the first impression of the inside of the church.
The gorgeous and wonderful reality of Venice is beyond
the fancy of the wildest dreamer. Opium couldn’t build such a place,
and enchantment couldn’t shadow it forth in a vision.
All that I have heard of it, read of it in truth or fiction, fancied of it,
is left thousands of miles behind.
You know that I am liable to disappointment
in such things from over-expectation,
but Venice is above, beyond, out of all reach of coming near, the imagination of a man.
It has never been rated high enough.
It is a thing you would shed tears to see.”

Charles Dickens, Extract from a letter to John Forster, 1844



5.2

VeniSIA Contacts

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Venice
Sustainability
Innovation
Accelerator

VeniSIA

The oldest city of the future

On the cover:
Photo taken by Claudio Schwarz
Santa Maria della Salute, Venezia
on unsplash.com