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Where virtual becomes real

Whitepaper for token sale

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1 What is the Metaverse and why now?

1.1 Evolution of social relationships

By cooperating with others, we are able to build social relationships which, in turn, allow us to gain access to resources, information and security that would be beyond our reach as individuals.

Social relationships are continually changing and evolving over time. They are complex, multidimensional phenomena, which can be conceptualised in terms of individuals, of groups, of the kind of relationship, as well as their frequency, and the environment in which they take place. Nonetheless, all these different perceptions converge on one point, namely the effect these relationships have on the individuals participating and on their environment.

If we look at the manner in which we interact with each other, a key milestone in our history was the advent of online social networks that, thanks to the creation of the internet, made it possible for small groups of people in different places to communicate by text without the need to all be in the same place at the same time.

Since their arrival, the scope of online social networks has grown almost exponentially, starting with SixDegrees.com, in 1997, which allowed users to create a profile and make friends. Then, in 2002, came Friendster, which allowed users to upload photos and share them with their friends, as well as find friends based on shared interests. Shortly after came Myspace in 2003, a network allowing users to customise their profiles, via HTML coding, and to upload music and videos. Shortly thereafter Facebook launched, in 2004, starting out as a small group where users shared information about themselves and on different topics, growing its community to now reach over two billion active users.

This past decade has also seen the emergence of content-specific social networks, such as Twitter, Instagram, YouTube, Twitch, TikTok and Discord, to name just a few. These networks started by specialising in different kinds of content, such as text, photos, videos, currencies, etc.

Social networks have naturally evolved as a result of the technological advances, which we will cover below. They allow us to benefit from social relationships that are more immersive, thus enhancing our lives.

1.2 Human desire to transcend

It is a part of our nature, as human beings, to seek to transcend beyond our limitations of space and time set down by the laws of physics and nature. For centuries, we have researched, analysed, invented and developed tools, objects, machines, more specifically: technology, which as allowed us to interact with others beyond our immediate surroundings and our real time.

It is our innate creativity, ingenuity and cooperation, coupled with our aim to transcend, which drives us to innovate and motivates us to pursue new ways to perceive new sensory experiences.

1.3 Technological evolution

The different immersive technologies (Extended Reality, XR; Virtual Reality, VR; Augmented Reality, AR; Mixed Reality, MR) allow us to add new dimensions to the ways we interact and perceive new sensory experiences.

In parallel to this, blockchain technology has revolutionised the way we document all types of transactions: its decentralised network offers substantial advantages in terms of security, transparency, immutability and the control of information.

The web 3.0 concept is based on new technologies, such as blockchain, and seeks to decentralise collaboration through the internet in which currently the function of users is limited to a consumer role. Instead, in web 3.0 they become creators and stakeholders who contribute to the construction of a network in which they are also owners of the information they generate, such as data and advertising.

Artificial Intelligence has made it possible for machines to learn from experience, to adapt to new behaviours and perform human-like tasks. This technology not only helps us to make decisions more quickly and accurately, but also makes it possible to automate key functions in any area of human intellectual activity.

1.4 Metaverse

The constant development of all these disruptive technologies and their very recent confluence, means we now have tools that will allow us, as human beings, to fulfil our desire to transcend and to experience the concept of the metaverse. At Alvearium, we define this as a digital space that allows us to engage with each other in a more immersive way, without the physical limits of space and time. In short, it will be a large, multidimensional social network powered by technology that will allow us to do things that cannot be done in the real world.

1.5 Market

In the past two years, we have all experienced the evolution towards a more digitalised society that interacts in more virtual environments. Here are just some examples illustrating this evolution:

a) Remote work is consolidating in all sectors and human relationships are becoming more virtual. To illustrate this, on 27 April 2022, Microsoft announced that 145 million people use its Microsoft Teams platform daily[1].

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1 Latinshare, "Microsoft Teams alcanzó 145 millones de usuarios diarios" April 19, 2021,
http://niuoffice.com/2021/04/29/microsoft-teams-alcanza-los-145-millones-de-usuarios-diarios/

b) The digital space is bursting as a new niche for the fashion industry. One such example is "The Gucci Garden Experience", created in 2021 by Gucci to offer virtual products for sale, which actually sold a 100% virtual digital twin of one of its handbags for a higher price than the real thing[2].

c) There is high demand for new ways to experience social events. For instance, a Travis Scott concert on Fortnite drew 27.7 million viewers, well above what would be possible in the physical world[3].

d) Digital assets are becoming part of the art world. By way of an example, the prestigious London auction house Christie's incorporated non-fungible Tokens (NFTs) into its line of business In 2020 in its first auction for an NFT, a work by the artist Beeple titled Everydays: The First 5000 Days. That auction set a double record for the company: it sold the most expensive digital artwork in history for $69 million, and it became the first auction house to accept payments in cryptocurrencies[4].

There is not yet a single marketplace that can be called the metaverse. In fact, it is currently at the intersection of several large markets in full expansion. We have analysed the five markets that we believe to be most aligned to Alvearium's unique value proposition:

1.5.1 Social networks

The use of social networks has surged since 2015. The global market currently stands at 4.62 billion users, with a year-on-year growth of over 10% in 2021. In other words, in just one year, social networks have gained 424 million new users. In fact, the number of social network users is now equal to more than 58% of the global population and the number of platforms used globally by the active population (people aged 16 to 64), averages at 7.5 social networks per user.

Moreover, daily time spent on social networks continues to increase, currently averaging at around 2 hours and 27 minutes and one in four internet users aged 16 to 64 discovers new brands, products and services through advertisements on social networks[5].

1.5.2 Cryptocurrencies

According to data provided by Crypto.com, (a leading crypto exchange app), the year 2020 closed with 106 million cryptocurrency users worldwide, reaching 295 million by the end of 2021, nearly tripling the number of users in just one year.

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2 Accenture, "Nos vemos en el metaverso", 2022,
https://www.accenture.com/_acnmedia/PDF-174/Accenture-Technology-Trends-2022-Nos-Vemos-en-el-Metaverso.pdf

3 Marcos, Ana, November 8, 2020, "Los videojuegos, el nuevo escenario de la música pop",
https://elpais.com/cultura/2020-11-07/los-videojuegos-el-nuevo-escenario-de-la-musica-pop.html

4 Perez, Enrique, Marzo 11, 2021, "Beeple vende su NFT por 69 millones de dólares: una subasta histórica que lo coloca entre los tres artistas vivos más exitosos"
https://www.xataka.com/criptomonedas/beeple-vende-su-nft-69-millones-dolares-subasta-historica-que-colo-ca-tres-artistas-vivos-exitosos

5 Hootsuite y We are social, 2002, "Digital 2022: Global Overview Report, The Essential Guide to The World's Connected Behaviours" https://wearesocial.com/es/blog/2022/01/digital-2022/

This phenomenal growth is probably owing to two factors. Firstly, some users are attracted by the novelty and disruptive spirit of this technology and, secondly, cryptocurrencies attract speculation from private investors and equity firms.

Crypto.com forecasts that by the end of 2022, the number of users will, once more, have increased three-fold to one billion, almost reaching a size on par with the major social networks[6].

Finally, the total market capitalisation is somewhere in the region of USD 1.26 trillion[7] and, similarly, Banco de España indicated that the volume of transactions with this type of assets in reached €60,000 million in 20218[8].

1.5.3 NFTs

Within the cryptocurrency field, the Non-Fungible Token (NFT) market must also be mentioned. Although NFTs have been in existence since 2014, it was in 2021 that this novel cryptographic asset really made its way into the market and gained widespread popularity. Total sales of NFTs reached USD 25,000 million in 2021, according to data collected by DappRadarr[9]. Large companies such as American Express, Gucci, Nike, Pull and Bear, athletes, musicians and artists are seizing the opportunities offered by this market.

1.5.4 Augmented reality and virtual reality

According to data from IDC, a leading global intelligence firm, sales of virtual and augmented reality display devices rose by 92.1% in 2021. The outlook for 2022 is for the market to return to a growth of roughly 50%[10].

It is this market that has the most potential to evolve, particularly in terms of user experience. There are around 26 million active virtual reality devices on the market, way behind the 14,000 million mobile devices[11].. These data show us the massive growth potential, provided that improvements in user experience are able to achieve the mass adoption of this technology.

6 Wang, Kevin, Hong, Henry, Wu, William, Bolger, Michael , Zhou Joy, January 2002, "Crypto Market Sizing", https://crypto.com/research/2021-crypto-market-sizing-report-2022-forecast

7 Wang, Kevin, July 2020, "Measuring Global Crypto Users. A Study to Measure Market Size Using On-Chain Metrics" https://crypto.com/images/202107_DataReport_OnChain_Market_Sizing.pdf

8 Sánchez, Alvaro, April 26, 2002, "Las criptomonedas movieron unos 60.000 millones de euros en España el año pasado", https://elpais.com/economia/2022-04-26/las-criptomonedas-movieron-unos-60000-millones-de-euros-en-espana-el-ano-pasado.html

9 Zare, Medhi, January 12, 2022 "Las ventas de NFT alcanzaron un récord de 25.000 millones de dólares en 2021: Informe" https://es.crypto-economy.com/las-ventas-de-nft-alcanzaron-un-record-de-25-000-millones-de-dolares-en-2021-informe/

10 March 23, 2022 "Buenas perspectivas para el mercado de realidad virtual y aumentada" https://www.ittrends.es/negocios/2022/03/buenas-perspectivas-para-el-mercado-de-realidad-virtual-y-aumentada

11 Benayas, Enrique, Albalá, María, Grana, Belén, Serrano, Manuel, 2002, ESIC + ICEMD "Innovation Series: Metaverse Impact in Real Life" p.31.

1.5.5 Real estate market in virtual worlds

In the real estate market, virtual sales of parcels of land in 2021 will reach USD 500 million according to data from MetaMetrics Solution. Furthermore, a report by BrandEssence Market Research forecasts that the metaverse real estate market is expected to grow at an annual rate of 31% during 2022 – 2028[12]. Activity today is mainly concentrated on platforms: Decentraland, Sandbox, Cryptovoxels and Somnium Space. To illustrate this growth, Decentraland alone saw 21,000 real estate transactions valued at USD 110 million in just the past 12 months. The boom in this market has led to the creation of real estate companies specialising in these digital assets, such as Republic Realm and Metaverse Group. The former, reached the record of investment in digital land with a figure of more than four million dollars in November 2021[13].

To conclude, these markets have three distinguishing features that highlight their importance and interest:

a) Sustained growth over time with upward growth forecasts.

b) Interrelationships and mutual benefit between each markets while, at the same time, they are of a sufficient size to operate on a stand-alone basis.

c) Most are home to emerging and fast-growing submarkets.

1.6 Problems observed

- Most of the metaverses currently being built are focused on the play-to-earn model. However, there are many other options to create value using the latest technologies that have still not been exploited.

- Users of mainstream social networks have become a data commodity over which they have no control. Similarly, users are not rewarded for the cession of their data.

- There is far too much low-quality content consumed on social networks.

- The time that many kids and teenagers spend in front of screens playing games is excessive, and there is no rational control based on medical criteria.

- The growth of the social network economy is not being used to make a positive impact on the world.

- Projects that launch hundreds of Tokens on the market without proper backing with real returns to make them economically sustainable over time, mean such projects become a mere vehicle for speculation.

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12 BBVA, "Boom' inmobiliario en el metaverso: ya hay compraventa rentable de terrenos para casas y ciudades" https://www.bbva.com/es/boom-inmobiliario-en-el-metaverso-ya-hay-compraventa-rentable-de-terrenos-para-casas-y-ciudades/

13 Globe Newswire, Jan. 25, 2022, "Metaverse Real Estate Market is Growing at 31.2% CAGR to 2028 Says Brandessence Market Research" https://www.globenewswire.com/news-release/2022/01/25/2372332/0/en/Metaverse-Real-Estate-Market-is-Growing-at-31-2-CAGR-to-2028-Says-Brandessence-Market-Research.html.

2 What is Alvearium?

2.2 Our solution

Alvearium is a social network based on Web3 protocol, providing virtual spaces where multimedia content can be created and shared in an interactive and immersive way.

Visually, our platform is a virtual world inspired by and grounded in the real world. We will begin by creating spaces in the world's foremost cities, such as New York, London, Paris, Madrid, Barcelona and so on.

The platform will be based on blockchain technology, creating a transparent, immutable, autonomous and secure ecosystem. It is also our goal is to decentralise the platform over time, so that the community, through the decentralised autonomous organisation (DAO), will gradually make the decisions, whilst upholding the culture and values of the Founding Team.

The Alvearium community, thanks to its technology, the ecosystem created and its founding team and values, will create a metaverse that positively impacts the real world and whose actions will be channeled through the Alvearium GTE Foundation.

2.1 Vision, mission & values

Our mission is to make the most advanced and decentralised technologies available to everyone so that we can all improve the way we interact with each other and with our environment.

We are on the threshold of one of the most momentous changes in history in terms of the way in which we, as human beings, interact with each other. It is a new era in which virtual and augmented reality will allow us to enjoy sensory experiences unlike anything we have ever experienced before, through the use of accessories that connect our senses to the most advanced hardware.

The advantages that technological advances offer us, through eliminating space-time limits in our social relationships, would not have any real added value if they were only used for entertainment or speculation.

At Alvearium we are creating an ecosystem with its own economy that will be sustainable over time. We will seek to understand the needs, motivations and incentives in our community and will always endeavour to surpass its expectations with our value proposals. In so doing, collectively we will make a positive impact on the real world that will improve quality of life.

Excellence
Use of the best practices seeking the highest quality.

Motivation
Positive attitude to work with perseverance and determination.

Resilience
Adaptation to the continuous changes of this disruptive world.

Teamwork
Collaboration and cooperation to create value and multiply productivity.

Ethics
Transparency, loyalty and honesty as factors of value creation.

Innovation
Vision to promote new ideas and apply continuous improvement.

Community
Faithful and collaborative with a focus on social responsibility.

"We have begun to write the next page in the history of mankind in terms of how we interact with one another, socially and economically, doing so in a way which that not only creates value but also safeguards the sustainability of our planet, whilst we also are able to enjoy our surroundings".

The Alvearium Founding Team

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2.3 Users / target audience

We foresee there will be different user profiles in Alvearium throughout its phases of development and implementation. Here are some of the most important user groups:

- **Private sale investors:** business angels, VCs or funds that invest more than $100K in crypto assets, NFTs, metaverse lands, and so on, as part of their high risk and high short-term profitability portfolio. Conversely, a portion of these investors will see our project as a long-term opportunity, given they will have the option to invest in land and buildings on the platform.

- **Public sale investors:** people aged 18 to 37 (mainly Millennials and Generation Z) who invest less than $100K in crypto and NFT assets and, either as part of their work or their personal interests, experiment in booming sectors. These investors watch trending topics and are, in part, driven by the fear of missing out (FOMO).

- **Real estate agencies in the metaverse:** expanding their business model in the metaverse and purchase, sell or rent parcels or buildings in order to increase their profiles.

- **Content creators:** people who publish on networks such as YouTube, Twitter, Facebook, Instagram, Twitch, LinkedIn or TikTok (influencers, bloggers, designers, artists, science communicators, online teachers, and so on.) and who want to merge all their networks or their current content, as well as create new 3D content in a single interactive space, thereby enhancing follower experience, boosting engagement and generating more revenue.

- **Alternative media agencies:** companies that represent influencers and want to buy, rent or manage parcels for the creation and/or presentation of content.

- **Brands:** companies or individuals seeking visibility, exposure, status, and so on, and who are willing to pay for publicity in the most visited ALVEAS (virtual spaces) and the most interesting spaces on the platform.

- **Businesses:** corporations and companies that want to have a virtual space in order to create better experiences for customers, making each of their products and / or services available for purchase.

- **Leisure and cultural spaces:** corporations and companies that seek to entertain users with sports, music, cinemas, theatres, museums, amusement parks, and a whole host of different events.

- **Services:** public or private entities wishing to offer interactive services in sectors such as education, health, wellbeing, employment, tourism, etc.

- **Positive Impact:** individuals or companies whose seek to generate a positive impact in real life through activities that will be organised through the Alvearium GTE Foundation.

- **Community:** users, as mentioned earlier, that want the content, products or services offered on the platform, such influencer followers, brand clients, event spectators, online students, etc.

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2.4 Value proposition and revenue model

There is no single value proposition; there are many because Alvearium offers differing value propositions for each of the groups described above:

Investors will be able to invest, and hence monetize, the different assets that will be available in our plattform (token ALVY, lands, buildings, Alveas, ...).

Influencers and content creators will be able to monetise multimedia content created on our outside the platform, publishing and promoting it in ALVEAS. Each content creator will be able to decide long how they want each piece of content to remain in their personal space.

Corporations and companies will be able to create virtual spaces for their brands in order to enhance user experience (UX) and increase engagement with their customers.

Organisations and public entities will be able to carry out virtual simulations of improvements in cities and public spaces, to later implement them in real cities thanks to digital twins. This minimised implementation risks and costs and maximises the chances of success.

The Alvearium community will be able to connect with multiple options that our ecosystem will offer, enjoying immersive experiences, obtaining at the same time rewards for time invested within the platform that, in turn, will allow them to collaborate with the different social impact initiatives carried out by the Alvearium GTE Foundation (as explained in point 4).

Alvearium's revenue model will evolve along the following lines:

- **B2B and B2C Direct sale** of Tokens to investors.
- **B2B and B2C Direct sale** of buildings and/or land to investors.
- **B2B and B2C Direct sales** of virtual spaces to content creators and agencies.
- **B2B and B2C Commissions** for usage.
- **B2B and B2C Rental** of buildings, land and/or ALVEAS to agencies, corporations and content creators.
- **B2C Freemium** in the later stages of the project, some users will pay a PREMIUM fee in order to access privileges whereas other users will continue with free services.

2.5 Alvearium's key assets

As mentioned above, Alvearium will recreate the main cities of the world, in which there will be different digital assets, in the form of NFTs, which users will be able to purchase or rent:
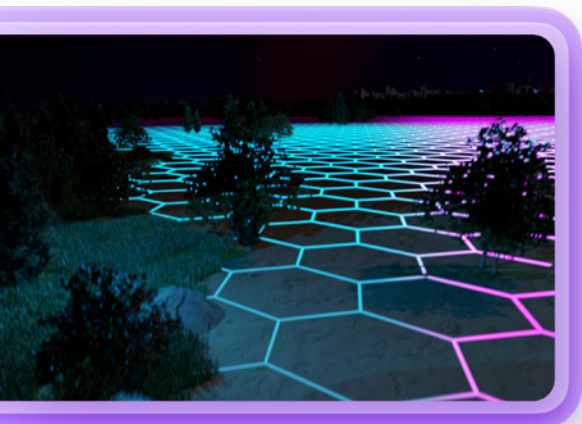
2.5.1 Parcels

The parcels are the hexagonal divisions that will be made in those areas of the map of the cities where there are no emblematic buildings. The owners of these parcels be able to construct buildings of any type.

2.5.2 Buildings

As explained above, a building will be the construction that has been established on a plot of land.

Each city will initially have important areas already built, with buildings inspired by reality that can be purchased directly by users. These areas will have a high value given their location and importance in the real world.

Most of the buildings will house ALVEAS, the number of which will depend on the height of the building. These may be sold or rented to other users, allowing the owner's investment to be returned.

In addition, different types of buildings may be constructed on the parcels, depending on their intended use:
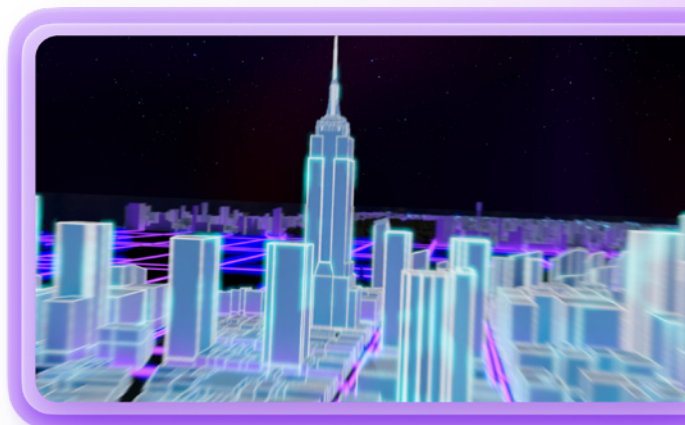
- **Personal.** Users may have content for private or public use.

- **Comercial.** Spaces for companies that want to have their virtual e-commerce space in order to enhance client experience and increase engagement with their customers, making each of their products and / or services available for purchase as well as being able to carry out all kinds of activities/events that build customer loyalty.

- **Leisure.** Spaces for user entertainment, such as sporting events, musicals, amusement parks, cinemas, theatres, etc,

- **Services.** Public/private entities offering interactive services in sectors such as education, health, wellbeing, employment, tourism, etc.

- **Landmarks.** Tourist attractions of great importance and value in the real world where public organisations will be able to receive visitors virtually, giving them an immersive experience, making tourism accessible to many more people in the world: immersive virtual tourism. All these buildings are hybrid spaces, more specifically, they are totally flexible giving users freedom of use. They may contain combinations of the different types of uses explained above. So buildings can simultaneously house personal, commercial, leisure or service areas (similar to shopping centres), allowing users to satisfy theirs needs quickly and efficiently.

2.5.3 Alveas

ALVEAS are 3D rooms located inside buildings. They are interactive spaces where multimedia content can be shared and created. They can be connected to other social networks and can store, exhibit and sell NFTs. The content can be public and/or private. Their usage functions will evolve according to the needs of the community, They may become, for example, spaces for: influencers, science communicators, artists, private museums, metaverse housing, meeting rooms, music rooms, individual commercial premises, etc.

The shapes and textures of the interior of the ALVEAS can be customised according to users' needs. Initially, they will have a standard look and feel. However, Alvearium's team of developers will create different kinds of ALVEA designs, and it will also be possible to commission bespoke designs.

2.6 Technology

2.6.1 Immersive technologies

As stated earlier, our mission is to make the most advanced and decentralised technologies available to everyone so that we can all improve the way we interact with each other and with our environment.

We are well aware that these technologies are not very commonly used by the majority of society, so we have opted for a progressive technological development that enhances user experience gradually and that is sustained over time.

Therefore, the initial phase of development seeks to generate an experience in web and app format, in which users will explore interactive 3D rooms in an intuitive way with no constraints to movement. Moreover, this experience may be shared simultaneously with other users.

In these spaces, users will also have the option to share content created both inside and outside Alvearium, for example, images, videos, live streamings, 3D objects, documents, links to generate interaction with visitors, to promote their products, or to redirect traffic to their website and, not forgetting, of course NFTs.

Interaction among users will take place through a microphone connected to the user's device. This communication will be transmitted via VoIP protocols. A customisable 3D proximity audio system will also be included, allowing users to define the sounds to be heard. This technology enables independent and/or private conversations and are efficient even in environments with many users.

Users will be identified by means of customisable avatars, whose appearance, clothing and even animations may be modified.

As part of the technological development plan for the continuous improvement of Alvearium, the visualisation of 3D environments will be enabled using extended reality technology, as a new, more immersive way to experience spaces.

Technological innovations in software and hardware that enhance immersive experiences will play a key role in the evolution of Alvearium.

2.6.2 Blockchain technology

The platform will be based on blockchain technology in order to provide transparency, immutability, autonomy and security to the project.

At the moment, Ethereum is the most widely deployed and funded blockchain on the market. Considering the high volume of transactions expected in a platform like Alvearium and the high cost per transaction of Ethereum's mainnet, the decision was to launch Alvearium on the Polygon network, Ethereum's layer 2. This will allow transactions to be processed more quickly and at lower cost. This gives our platform scalability, whilst leveraging the benefits of the popular Ethereum network.

The following items will be deployed on the blockchain:

ALVY Fungible token

Alvearium's utility Token, based on the Ethereum ERC-20 standard, imported from the OpenZeppelin library and audited by our partner Dekalabs.

NFTs

Non-fungible Tokens based on the ERC-721 standard, also imported from the OpenZeppelin library.

There will be 2 types of NFTs:

· Assets that the platform offers to investors and the community: land, buildings and ALVEAS, as detailed above in point 2.5.

· Assets that users can import from another platform or create in-house and use, display, rent, sell or store privately and securely in their ALVEAS.

POAP Certificates

Proof of Presence Protocol (POAP) is a digital certificate in NFT format that users obtain to prove they have attended an event or viewed content. It allows users to obtain access to the benefits and/or rewards that they earn as a result of such activities.

DAO

The founding team reserves the right to use different moderation mechanisms on decisions it makes, always safeguarding the interests of the community and the value of its assets, and ensuring that the phases laid out in the Roadmap are fulfilled.

Once the ecosystem is up and running, people who meet a series of conditions, as detailed below) will be granted governance power the rights to vote on decisions on the future of the platform. Thus, a gradual decentralisation of the platform will begin. The goal is for users to become active participants in the creation of the Alvearium metaverse.

Thanks to the governance system of the decentralised autonomous organisation (DAO)'s governance system, individuals are granted voting rights depending on with three factors:

- **Degree of involvement in the project: a** the number of governance Tokens purchased.

- **Knowledge of the project:** the t_{user}/t_{found} time they have been involved in the project since the foundation was constituted.

- **Degree of commitment to the project:** t_{block}/t_{max} time blocking the Token in relation to the maximum time it can be blocked.

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And therefore, the voting power (w) of the voting system established in this DAO will be defined by the following formula: $w = a \times (t_{user})/(t_{found}) \times (t_{block})/(t_{max})$

Smart contracts

The DAO's operation is based on compliance with the provisions of its smart contracts, making the agreements immutable, so that commitment and responsibility are paramount.

2.7 Tokenomics

The monetary policy of the ALVY Token itself, together with the ecosystem created by the Alvearium team and community, will generate utility and profitability enabling sustainable growth in the value of the platform, and thus of the Token itself.

2.7.1 Monetary policy

Distribution, vesting and blocking

The following shows the distribution of the Token, as well as its blocking and vesting periods:

TOKEN SALE ALLOCATIONS, VESTINGS & BLOCKINGS	TOKEN (%)	TOKEN (Million)	PRICE ($)	HARD CAP (Million $)	BLOCK (Months)	VESTING (Months)
PRIVATE PRE-SALE	3	30	0.09	2.7	6	6
PRIVATE SALE	9	90	0.11	9.9	6	6
TOKEN SALE	9	90	0.22	19.8	3	3
RESERVE	40	400			6	30
TEAM	10	100			18	18
ADVISORS	3	30			6	12
BOUNTIES/INCENTIVES	15	150				12
PARTNERSHIPS	7	70				12
DEFI/AMM	4	40				1
TOTAL TOKENS	100%	1.000MM				
TOTAL TOKEN SALE		210MM		$32.4MM		

The distribution of Tokens can be represented as follows:

Legend:
- 40% Reserve
- 9% Token Sale
- 9% Private Sale
- 3% Private Pre-Sale
- 4% Defi/AMM
- 7% Partnerships
- 15% Bounties/Incentives
- 3% Advisors
- 10% Team
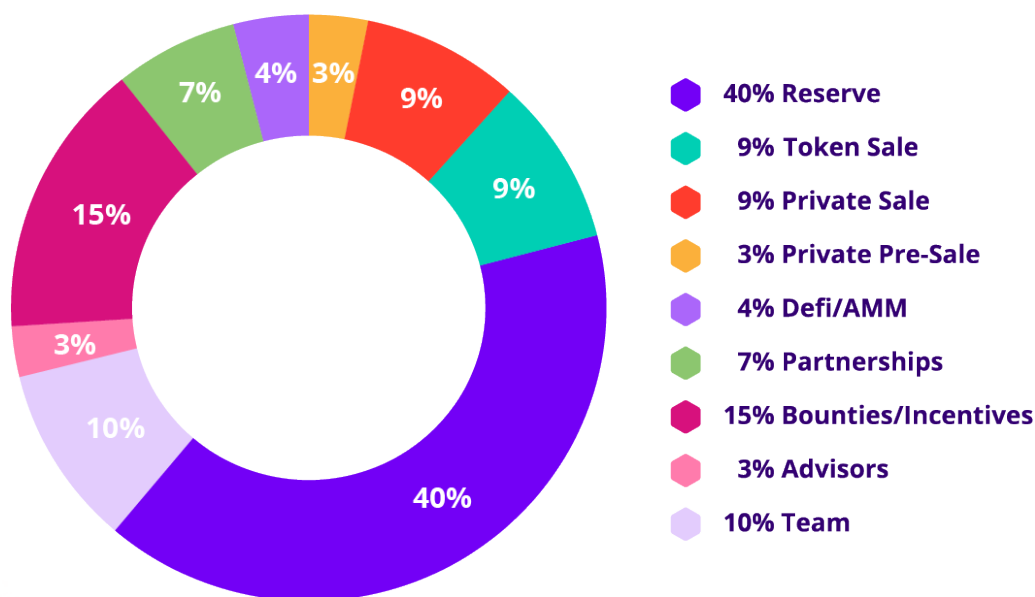
Dynamics and evolution of token value

The objectives of Alvearium's founding team in relation to the Token's monetary policy are:

1. **Satisfy users' need for liquidity.**

2. **Minimize price volatility.**

3. **Grow the value of the platform.**

As in any ecosystem, there will be different market forces that influence the evolution of Token supply and demand.

From a demand perspective, the founding team, together with our partners, aim to continuously develop functionalities for the platform that enhance our value proposition. With a progressive increase in usability, we aim to increase demand for the Token.

From the supply perspective, despite the fact that, as we have seen in the table above, Alvearium is responsible for a series of commitments for the distribution of Tokens, lock-up periods and vestings with ICO investors, the team, advisors and different suppliers, the platform reserves the following two mechanisms, among others, to try to match supply to demand, wherever possible:

- Reserve of 40% of the total amount of Tokens, which will be progressively released.

- Reuse (not burning) of the Tokens that users use to pay Alvearium. These will become part of the reserve and will be progressively released again.

Next, we will look at our Token release forecast based on our expectation of demandevolution. We expect to release half of the Tokens in the first year and the other half during the following two years in a continuous and linear fashion.
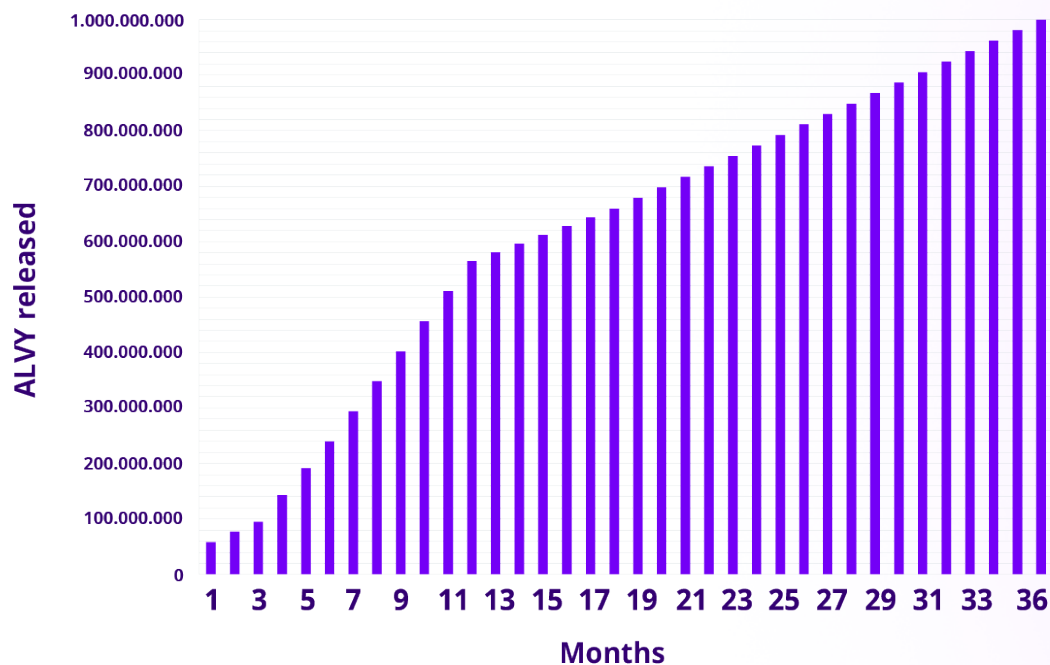
2.7.2 Token utility

These Tokens released can be used for:

- **Purchase, sale or rental of Alvearium's NFTs** (parcels, buildings, landmarks and ALVEAS).

- **Purchase, sale or rental of users' NFTs** (imported from other platforms or created within).

- **Subscriptions to the contents** of an ALVEA.

- **Advertising charges or payments.**

- **Watch To Earn rewards.**

- **Participation in events, games, auctions, challenges, etc.**

- **Purchase of accessories and textures** to enhance ALVEAS and therefore the experience of content consumers.

- **Creation and design of NFTs.**

- **Promotions** to appear in the suggested keywords and **have greater visibility.**

Additionally, Tokens can be blocked, and, depending on the amount and the time they are blocked, the user will earn different statuses that, in turn, have different benefits. These levels and benefits are yet to be defined; however, here are some examples:

- **Voting power in the future DAO.**

- **Discounts on product purchases or subscriptions.**

- **Benefits for content creators to position the ALVEA.**

- **Access to certain exclusive areas/clubs (virtual and physical).**

- **Vote for the best ALVEAS.**

- **Higher rewards for being in the top-voted ALVEAS.**

Finally, the ALVY Token will have interaction functions with the real world, for example, in the following ways:

- **Generation of liquidity pools** where interest would be obtained for purchasing liquidity.

- **Generation of bonds** to repurchase liquidity from users through Token discounts (Protocol Owned Liquidity).

- **Purchasing GTE Tokens from the foundation to generate impact.**

Taking into account these utilities, here are several examples of use:

a) Content monetisation. The owners of ALVEAS will be able to upload and create content, and share it with their followers. The higher the value and views of the ALVEAS, the more reach they will have, thus allowing them to earn advertising revenue from brands.

b) Rewards for content consumption. By developing on Web3, thanks to blockchain technology, users become the owners of their data and decide whether to consume advertising or not. In case of consuming and giving data, they will be entitled to rewards, which can be in ALVYs or GTEs.

c) Subscriptions to exclusive content. Depending on the quality of the content, influencers may ask their followers for their support by paying a monthly fee to access certain content, thus having a FREEMIUM model.

**d) Buying, selling and renting ALVEAS.** The acquisition of ALVEAS will not be limited to personal use; users may to invest in unoccupied ALVEAS with a strategy to sell or rent later.

e) Creation and sale of NFTs. Sale of NFT assets on the platform itself or on other platforms, such as OpenSea.

f) Creative services from other users. Influencers may to ask a 3D designer to create exclusive content for their ALVEAS.

2.7.3 Funds raised

The funds raised will be reinvested mainly in our team and advisors (45%), technology (35%) and marketing (20%) as shown below:

- 45% Team & Advisors
- 35% Technology
- 20% Marketing
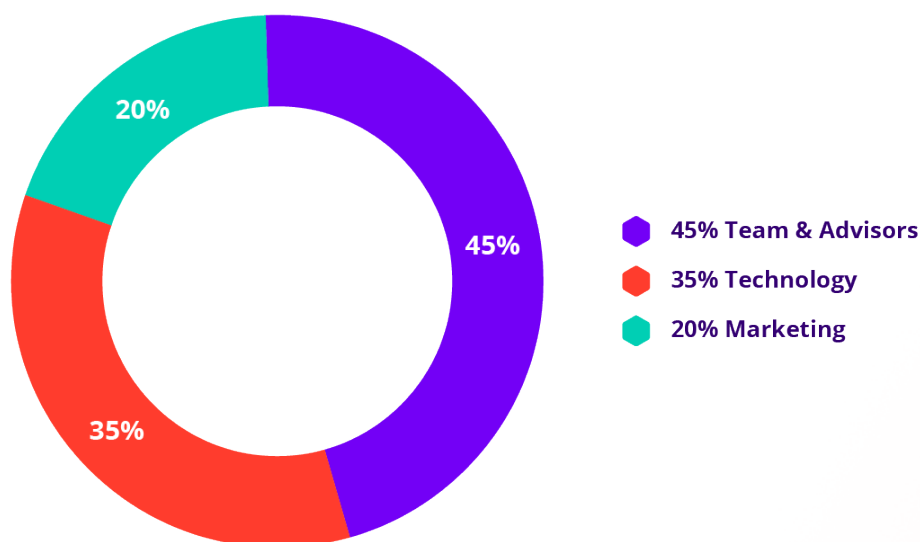
2.8 Social network functionalities

Alvearium is positioned in the early stages as a web3 social network. The purpose, as mentioned earlier, is for it to become a decentralised network, where content creators will be able to attract their followers and offer them a more immersive experience thanks to its virtual spaces.

It is a process that we will be implementing little by little in the different phases of the project.

During Phase I users will be able to create an account and start making friends and gaining followers.

Subsequently, during phase II, users will be able to share all their social networks in the 3D space, thereby giving their followers the opportunity to access, from one space, to users' networks (Instagram, Twitter, Youtube, Twitch, and so on) as well as any podcasts or other content created outside the platform.

Within the same phase, when we incorporate the Software Development Kit SDK, it will be possible to create content on the platform.

Furthermore, when the blockchain technology is deployed, there will be an encrypted chat system that users will access through their wallets and will let them own their data.

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3 How will we make it happen?

3.1 Planned phases

Fase I
Resources
🚀 Team
🚀 Partners
🚀 Web
🚀 ALVY Token Creation
🚀 Alvearium GTE Foundation
⚡ Marketing & Community
⚡ Financing

Fase II
Social network
Interactive 3D Sapces
Sale NFTs Assets
Social Network
VR Cities Development

Fase III
Metaverse
Partnership Avatar & Wearables
Partnerships VR | AR Devices
Inmersive Experiences

Fase IV
Smart cities
Simulation of Smart Cities (Digital Twins)

3.1.1 Phase I | Resources

This phase began in Q4 2021 and will last until Q4 2022, at which time the public sale of the Token will take place and the beta version will be launched. This phase comprises the following steps:

- Create the founding and development team.

- Reach agreements with strategic partners (tech companies, media agencies, public entities, universities and schools).

- Launch the web.

- Launch the promotional video.

- Start building our community through social networks.

- Create the ALVY Token.

- Private Token pre-sale.

- Marketing strategy application (branding, Google Ads, Events, promotional space in Decentraland).

- Develop the beta version of the platform (4-5 spaces of different typologies).

- Private and public sale of Tokens.

3.1.2 Phase II | Social network

This phase will begin in Q4 2022 and will last for several years, during which we will evolve as technology improves in the market, creating more and more immersive experiences:

- Beta version testing.

- Develop alpha and 1.0 version of the platform.

- Agreements with strategic partners (XR accessories, avatars, interoperability).

- DAO establishment.

- Commercial agreements with major brands.

- Purchase and sale of Alvearium Assets (parcels of land, buildings, ALVEAS and emblems).

- Creators will start to monetise their content.

- NFTs Marketplace.

- Progressive evolution in immersive technologies in preparation for phase III Metaverse.

- Team growth.

- Creation of new utilities to increase Token circulation speed and demand.

3.1.3 Phase III | Metaverse

There will be no discretionary moment when Phase III begins, but rather there will be a progressive evolution of technologies making the users' sensory experience within Alvearium increasingly immersive, decentralised and interoperable. At that point we will be enjoying the metaverse. During this phase, the technology necessary to achieve the objectives of Phase IV will be researched, developed and innovated.

3.1.4 Phase IV | Smart cities

Alvearium was created with the purpose of generating positive impact in the real world thanks to the technologies used in the project, which is why we based the creation of the platform on real cities.

The main goal is to enable users, who share our vision, to simulate the first 100% intelligent and 100% self-sufficient cities in the real world in the virtual world.

We want to our Community designs the cities of the future, where the quality of life of human beings and the sustainability of the environment are at the centre, where human beings have the tools and the time to develop technology for progress, where people can make decisions in a more intelligent, objective and fair way, thanks to blockchain technology and artificial intelligence.

To achieve this, we will work with the objective of implementing a simulator, capable of creating Digital Twins, with which we will design, prototype and technically and economically evaluate the feasibility of these cities in order to make them a reality in the largest public-private collaboration ever seen.
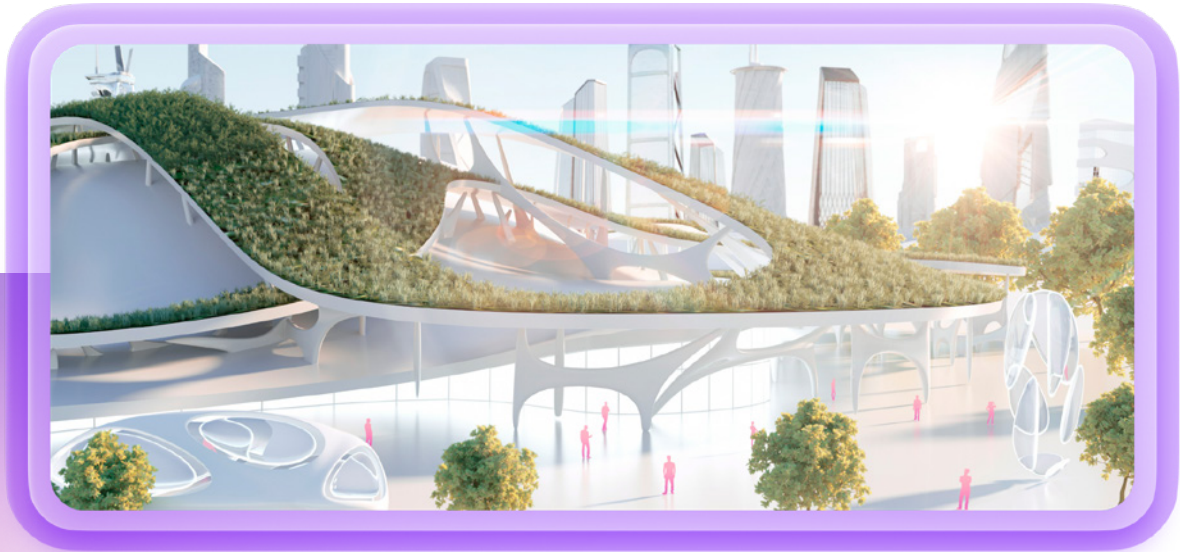
3.2 Team

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Executive management & finance

Luis Manuel Fernández

Technology

José Miguel Fernández

Nuria Cejudo

Daniel Alcalde

Marketing

Luis Martín

Sofía Alcalde

Rubén Mancera

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3.2 Team

Design & extended reality

Alejandro Ansodi

Oscar Escallada

Niko Iturregi

Irati Gutierrez

Blockchain, innovation & foundation

Dimitri Lobato

Gonzalo Laborda

Talent management

Pol Echarri

Inés Navarro

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3.3 Partners

These are the partners who trust us and accompany us in the project.

DEKALABS

Tokenomics design, ALVY token development and blockchain technology consulting.

Google

Startup accelerator program (marketing campaign creation, social media and SEO positioning) for community creation.

DEUSENS HIPEREXPERIENCIA

Audiovisual production, 3D content and immersive technologies.

NOVADEVS

Web prototype design and development.

PLAY OFF NATIONS AGENCY

Agency specializing in unconventional media. Influencer marketing and product testing.

MONDRAGON UNIBERTSITATEA

Talent acquisition and management in the Basque Country

GTE DESIGN THINKING

Analysis, draft, creation and test of prototype using Design Thinking Methodology

GTE Partner

Financial, Strategic and Organizational Advisory.

dayone scaling up

Prototype and seed phase financing, promotional space in venues and potential investors contacts.

Bizkaia beaz

Subsidy and support during launching start ups within Basque Country ecosystem.

CIEM Centro de Incubación Empresarial Milla Digital

Start ups incubator within Zaragoza ecosystem.

ALDEA ARELLANO & PRIETO ABOGADOS

Corporate legal advisory.

init Group

Spain social impact Start ups accelerator.

OutOfOffice in Zaragoza

Belisure and coworking spaces.

VISION MRO

Market analysis, testing, business models support.

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3.4 Marketing strategy

The main objective of the marketing area, comprising a team of experts in digital marketing and community building, is to create a trustworthy brand and a strong online community.

3.4.1 Community building

The community building strategy is based on the principles and objectives of the founding team, with three pillars:

Purpose: in line with our mission, the purpose of the community will be, relying on our technology and ecosystem, to enjoy more immersive virtual social relationships and at the same time generate positive impact in the world, channelled through the Alvearium GTE Foundation.

Value: in line with our mission, the purpose of the community will be, relying on our technology and ecosystem, to enjoy more immersive virtual social relationships and at the same time generate positive impact in the world, channelled through the Alvearium GTE Foundation.

Governance: as explained in point 2.6 regarding the DAO, we will start with a centralised model in which the founding team will make the most important decisions for the creation and initial development of the platform, as well as the implementation of its community culture aligned with our values. Over time, it will progressively evolve towards a decentralised model, through the DAO. The functioning of the DAO (voting power) will be given to individuals based on their degree of engagement

3.4.2 Social networks

Social networks are vital as a means to fostering the creation of the Alvearium community. The networks we will focus on are Twitter, Telegram, Discord, Facebook, Instagram, LinkedIn and YouTube. Our team will post frequent audiovisual content and creative posts through all channels, where our community will be informed of our progress and where any questions and issues related to our project will be clarified.

- **LinkedIn**   https://www.linkedin.com/company/alveariumvr
- **Instagram**   https://www.instagram.com/alvearium_/
- **Twitter**   https://twitter.com/alvearium__
- **Facebook**   https://www.facebook.com/Alvearium-105899155329412
- **YouTube**   https://youtube.com/channel/UC_CrhrY2j6OYr19PdbImNnw
- **Telegram**   Coming Soon
  - **TikTok**   Coming Soon
- **Discord**   Coming Soon
  - **Medium**   Coming Soon

3.4.3 Influencers and ambassadors

To promote the creation of the Alvearium community, the marketing team will initially rely on influencers, brand ambassadors and important partners to support and promote our project to their loyal followers.

3.4.4 Partnership with Google Ads

The marketing team, thanks to a collaboration agreement established with Google through its Google Ads accelerator program for projects with great potential and social impact, will advertise on digital channels and media. The collaboration aims to impulse visibility for our project in its initial stages.

3.4.5 Attendance at events and conventions

Alvearium will attend events and conventions related to the metaverse, blockchain technology and cryptocurrencies, during which important relationships and new agreements and collaborations will be established.

3.4.6 ICO/ITO Listings - Launchpads

Alvearium will register with the major ICO/ITO listings in order to expand its outreach and connect with the largest number of potential investors during ITO period.

3.4.7 Kick off promotional events

Our Marketing team together is defining together with Design Team different spectacular mix (presential/online) events in order to show different uses of our plattform.

4 Alvearium GTE Foundation

4.1 Mission

The mission of the Alvearium GTE (GoToExcellence) Foundation is to be a channel for actions that make a positive impact on society by harnessing Alvearium's technology, community and its entire social, economic and cultural ecosystem.

4.2 Vision

Leading the design, simulation and creation of the first 100% self-sufficient Smart Cities.

4.3 Values

- Cooperation and stewardship of the ecosystem.
- Importance of community.
- Innovation and the pursuit of excellence.
- Sustainability and self-sufficiency.

4.4 Organisation

CHAIRMAN: aligns the strategic objectives Alvearium GTE Foundation with those of Alvearium, representing and spearheading the company's values.

ADVISORY BOARD: prominent figures who are renowned in the areas or sectors in which the foundation operates. Functions in a proactive and advisory nature. Direct connection with the President and with the research and strategy area. Senior members have a special role to play.

EXECUTIVE DIRECTOR: manages and coordinates the day-to-day work. He/she is the spokesperson for the project, giving visibility, generating new strategic connections and managing institutional relationships.

DAO ASSEMBLY: constituted by the Alvearium community, aligned and committed to the founders' values in order to bring about positive impact in the world. Members will take part in decisions made with respect to the foundation's projects to be implemented, as well as its activities and governance.

EDUCATION AND COMMUNICATION: in charge of organising training, education and the communication of news for both internal and external activities.

RESEARCH AND STRATEGY: detects opportunities, proposes projects and generates useful documentation/monographs on Lines to propose to the Advisory Board and Executive Director.

AREA COORDINATORS OR MANAGERS: creates or attracts projects, establishing strategic relationships with the stakeholders in the pertinent sectors. Designs the needs of their for the Smart City.

4.5 Focus areas

4.5.1 Education and culture

Mission statement:

To envision, promote and create new education models that are more accessible, universal and of a higher quality, as well as to incentivise, assist, promote and disseminate the creation of cultural projects.

Examples of possible projects:

- Alveas promoted for the creation of content dedicated to educational and scientific dissemination.

- Negotiate agreements with schools to accept ALVYs as a means of payment and as an instrument to provide scholarships for underprivileged students.

- Design and build self-sufficient, sustainable educational centres, backed by the state-of-the-art technologies, our partners and the community that Alvearium will provide for us.

- Programmes for the promotion, creation, exhibition, distribution and dissemination of digital art (audiovisual or written works through the sale of an NFT of such works).

- Implementation of the Culture To Earn concept, creating virtual museum spaces where works of art are exhibited and, at the end of the tour, users take a quiz and, depending on their results, are given a reward.

4.5.2 Health, sports and wellness

Mission statement:

To increase people's quality of life.

Examples of possible projects:

- Attract and promote projects related to immersive technologies, NFTs, cryptocurrencies, and so on, which promote physical and/or mental health, with incentives such as the move-to-earn model.

- Project designed to improve medical care, using remote assistance technology, for elderly people living in rural areas.

- Promote the use of bicycles in the city as a means to improve people's cardiovascular health, as well as reducing pollution and traffic congestion. To this end, bicycles will be fitted with a device that allows them to track their usage and earn carbon credits, in the form of NFTs, which users will be able to sell.

4.5.3 Resource management, nature and sustainability

Mission statement:

To harness innovation, technology and ingenuity in order to promote the development and continuous improvement of resource management, prioritising caring for nature.

Examples of possible projects:

- Promotion and implementation of projects related to the blue economy.

- Development of projects seeking sustainable, efficient and cheap sources of energy.

- Projects designed to improve waste management.

- An immersive zoo, raising awareness of lesser-known or endangered species.

4.5.4 Architecture and urban mobility

Mission statement:

Attract architectural projects that design new models of sustainable and self-sufficient cities. Vertical, transversal and generalist.

Examples of possible projects:

- Creation of competitions with prizes that encourage thinking and design in these cities.

- Creation of an interactive museum on models of cities, towns or communities of different sizes that take into account the criteria required by the institution.

4.5.5 Equality, inclusion and governance

Mission statement:

To create spaces for open, transparent, inclusive and equitable spaces for citizen collaboration in the design and creation of the ecosystem focussing on blockchain technology and artificial intelligence.

Examples of possible projects:

- Spaces in Alveas reserved for education on concepts of equality in terms of age, gender, religion and race.

- Design and implement a digital management and governance model, using blockchain technology and Artificial Intelligence, to improve transparency and participation.

4.5.6 Development cooperation

Mission statement:

To improve visibility and conduct projects in the fields of education, economics, energy or governance in underdeveloped areas.

Examples of possible projects:

- Promotion and development of new ecosystems and business models in areas at risk of depopulation.

- Creation of compulsory education centres in underpopulated and/or underdeveloped areas with online teachers.

4.5.7 Society, innovation and technology

Mission:

To spearhead and accelerate the conceptualisation, design and implementation of the Alvearium ecosystem.

Examples of possible projects:

- Recruitment with incentives and rewards of talent within the community through challenges.

- Alvearium's main technological developments will be made available to the Foundation.

4.6 Operation

DAO DEMOCRACY:

The foundation upholds and strongly favours democratic management, as is evident in its values and organisation chart. Likewise, it values commitment shown by others to the project, their level of engagement and also their alignment with the Founding Team's values.

As a result of our DAO's governance system, its members have voting rights that depend on three factors:

- **Level of engagement with the project (a):** of governance Tokens acquired.

- **Project knowledge (t user/t found):** time operating in the project in relation to the date the foundation was constituted.

- **Degree of commitment to the project (t block/t max):** time the Token remains blocked in relation to the maximum time it can be blocked.

In conclusion, **voting power (w)** within the voting system defined in this DAO will be calculated using the following equation: $w = a \times (t_{user})/(t_{found}) \times (t_{block})/(t_{max})$

SMART CONTRACTS:

The functioning of the DAO is based on the compliance with the provisions of its smart contracts, ensuring that the codification of such contracts is immutable. The terms of these smart contracts include the Foundation's commitment and accountability to the Foundation's users.

However, the Foundation's management is ultimately responsible for ensuring the proper functioning of the Foundation.

PROJECTS:

The Foundation will collaborate with two types of projects that have different funding models:

- **Social entrepreneurship:** the goal being to make, whilst also making the project economically sustainable and even profitable.

- **Philanthropy:** the objective is to generate impact regardless of the financial results.

Most of the projects we will collaborate with and perhaps create will fall into the social entrepreneurship group. However, there will always be purely philanthropic/charitable projects with which we will collaborate.

FINANCING:

All the Foundation's transactions will begin by using the **GTE (GoToExcellence) Token,** which users will have obtained in Alvearium by means of rewards or incentives for content consumption, blocked ALVYs (ALVY utility), challenges solved, among other reasons.

The Alvearium community will have access to the Alvearium GTE Foundation's ALVEA where they will be able to choose which type of projects to support:

- **Social entrepreneurship projects:** the investor **will block GTE Tokens** that will be returned after the time defined for each project has ended.

- **Philanthropic projects:** investors **will donate GTE Tokens** for use in the project of their own choice.

Either way, the investor and/or donor will receive a special proof of attendance protocol (POAP), a non-fungible Token, that will certify their financial participation in the project.

On the basis of our forecasts, we see a new potential market, one which we can pioneer, namely a market for the sale and purchase of POAPs from philanthropic projects.

We base these forecasts on the assumption that there are users who, after participating in a particular project, may need liquidity or wish to recover the money they have donated. However, we have also identified a profile of donors that may want to participate in a project a posteriori, either because they were unable to donate in the beginning, or because they like to collaborate with projects that have already been completed and are therefore secure, without donors having to assume risks.

Investors and donors will be able to choose which projects to support, to support a specific Line or simply contribute to the foundation in general. In the latter case, the Foundation's DAO will decide how to distribute the funding across the different projects.

INSTITUTIONAL REALTIONSHIPS:

Agreements will be made with public and private institutions and associations for two purposes. Firstly, to bolster financing. Secondly, to work together on environmental problems. For example, agreements will be sought with local councils so that both citizens and users can help to improve their city by helping to create a better collective space. Alvearium will act as a facilitator in such cases.

4.7 Phases

We will organise the creation of the Foundation in three phases.

1ª FASE: Definition, team building, public-private agreement.

2ª FASE: MPV testing with three projects.

3ª FASE: Project developement and scalability

5 Glossary and legal notes

5.1 Glossary

Alvearium: a virtual world inspired by the real world. Likewise, the Alvearium community is formed by the users of this platform.

ALVY: Alvearium's fungible utility Token.

Blockchain layer 2: a secondary protocol (in this case. Polygon) over a main blockchain system, (namely Ethereum) that solves the difficulties of scalability, transaction speed and cost of the main blockchain.

DAO: Decentralised Autonomous Organisation refers to a revolutionary form of governance of organisations, which use Smart Contracts and blockchain technology to provide transparency, immutability, autonomy and security.

Digital Twins: a digital replica of a real-world element or set of elements. Digital twins have different potential uses. Our vision is to develop the technology to incorporate them into Alvearium to simulate scenarios for real-world improvements.

FOMO: Fear of missing out is a type of social anxiety caused by the impression a person has that the rest of the world is having rewarding and fun experiences without him. It is a pathology associated with technology and social networks.

GTE Token: fungible utility token of the Alvearium Foundation.

NFT: a Non-Fungible Token is a cryptographic asset that has the ability to be unique and unrepeatable. Thanks to blockchain technology, the properties of this type of Token can be stored and, thus it becomes possible to certify both the originality of the asset and its ownership.

POAP: Proof of Attendance Protocol, a digital certificate given to event attendees in their Ethereum wallet. On a technical level, a POAP is an ERC-721 Token created in Gnosis Chain. Each POAP is completely unique and can only be obtained if you have attended a specific event.

ROI: Return on Investment is the main indicator that an investor analyses to find out the profitability of an investment.

Smart Contract o contrato inteligente: An immutable computer program that self-executes certain actions that occur as a result of the fulfilment of a series of specific conditions established between two or more parties.

Token sale: refers to the issuance of tokens, also called "Initial Coin Offering" (ICO) or, more precisely, "Initial Token Offering" (ITO).

Web3: collective evolution of the relationships and experiences between brands, creators, artists, organizations, users, etc. that occur on the web2 (Social Web), which aims to provide privacy and control over information to users based on blockchain technology.

5.2 Disclaimer

This document is designed to provide information about the project described herein and, under no circumstances, constitutes an opinion concerning the purchase and sale of digital assets or is an incitement to participate in the metaverse.

The purpose of this White Paper is to provide information on the sale of 1,000,000,000 Tokens.

Furthermore, this White Paper serves to inform investors that Alvearium is continuously working to develop and improve its platform, content, policies and technology, as well as any technical details and parameters that may be necessary. As such, these aspects, as well as the functionalities of Alvearium described in this White Paper, are subject to constant updating.

Investors who are interested in this ITO and the crypto assets linked to it are hereby informed that the characteristics of the ITO outlined are based on distributed ledger technology, (blockchain), which, owing to its relatively new nature, is constantly evolving, with the risks that this entails and that are described in this White Paper.

The limited regulation of blockchain technology and, in general, of crypto assets, may lead to new legislation being passed, or new judicial or administrative rulings being issued, requiring substantial changes to be made to the project for which the ICO is designed. Any such situation will not require the Issuer to compensate Token holders in any way whatsoever.

Any information contained in this White Paper in relation to project development forecasts may differ from the results and, accordingly, such information may not be construed as a binding commitment for Alvearium.

Accordingly, this White Paper serves to caution investors that the investments described herein entail the assumption of high risk as the issued crypto-assets may:

        a) partially or wholly lose their value;

        b) not be always tradable on organised markets;

        c) not be liquid;

        d) may not be redeemable for the goods or services described herein, particularly in the event of a failure or disruption with regard to the issuance project.

The document is not nor should it be construed as an offer or solicitation for the sale of ALVEAS or digital parcels, but rather the issuance of Alvearium's own fungible Token: the ALVY. It does not constitute or form part thereof and should not be construed as an offer to sell or to underwrite a solicitation to purchase or underwrite any security.

The Issuer assumes responsibility for the contents of this White Paper and declares that it has exercised all reasonable care and that, to the best of its knowledge, the information contained herein is correct and accurate, and that no material facts have been omitted. With respect to the forecasts and targets concerning the implementation of the project contained in this White Paper, the Issuer is, of course, responsible for its actions in pursuing these targets in good faith, but the Issuer expressly disclaims all liability for the fulfilment of

these forecasts and targets, for any errors, omissions or inaccuracies in its content beyond the Issuer's knowledge, and for any direct loss or damages arising directly or indirectly from the content of this White Paper.

The information contained in this document should not be construed as legal, business, tax or financial advice of any kind. Any person interested in purchasing Tokens would be advised to seek the advice they deem necessary prior to making any investment decision in relation to this White Paper.

The contents of this White Paper are for informational purposes only and nothing contained herein, including the charts, should be used for making investment decisions. The information contained herein does not constitute significant information for making investment decisions.

The information contained in this White Paper may include or incorporate forward-looking references and statements that in no way constitute statements of historical fact or guarantees of future performance of in any way whatsoever. Any forward-looking statements, forecasts and estimates contained in this document are necessarily of a speculative nature and are based on estimates. These forward-looking statements are only estimates and are subject to error and may be affected by inaccurate assumptions or known or unknown risks, uncertainties and other factors, most of which are beyond Alvearium's control.

Moreover, the contents of this White Paper are to be understood without prejudice to the terms and conditions established for the use of Alvearium by users and any subsequent regulations that the Alvearium community may issue.

5.3 Risks

The purchase and use of Tokens involves the assumption of risks including, among others, the partial or total loss of the Tokens, or their value.

Persons wishing to purchase Tokens must only do so when they are fully aware of all the risks involved. Under no circumstances will the Buyer be compensated by the Token Issuer for the loss of value of the Tokens or any other event that is detrimental to the Issuer's interests.

Interested parties are hereby informed that, despite the existence of communications and/or recommendations by the Spanish National Securities Market Commission (CNMV) and other European regulatory bodies, there is no specific Spanish regulation on ICOs. The CNMV's statements on crypto-assets and Initial Coin Offerings are provided below for information purposes:

- CNMV considerations on cryptocurrencies and ICOs addressed to market professionals, dated 8 February 2018: https://www.cnmv.es/Portal/verDoc. axd?t=%7B9c76eef8-839a-4c19-937f-cfde6443e4bc%7D

- Joint press statement by the CNMV and the Banco de España on "cryptocurrencies" and "initial coin offerings" (ICOs), dated February 8, 2018: http://www.cnmv.es/ Portal/verDoc.axd?t=%7bf3ab3acc-c4fc-4b99-b61f-b9ef8dab7a98%7d

- Statement on fundraising operations through Initial Coin Offerings (ICOs), dated 26 March 2019: https://www.cnmv.es/Portal/verDoc.axd?t=%7B54a67a2d-4691-405f-942b-1755ea195cf1%7D

- Joint press statement by the CNMV and the Banco de España on cryptocurrency investment risks, dated 9 February 2021: https://www.cnmv.es/portal/verDoc.axd?t=%7B52286f9f-c592-4418-9559-b75bf97115d2%7D

On the other hand, interested parties are informed that there is a Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937 (COM/2020/593 final) pending approval at the time of drafting this White Paper. Although this EU Regulation Proposal has been taken into account when drafting this White Paper, interested parties should take into account the wording of this EU Regulation when it is finally approved and enters into force, as this will be the moment when a regulatory framework for the issuance, trading and custody of Tokens will be determined.

When Tokens are issued, investors should be aware that the legal nature of the rights derived from the Tokens cannot be guaranteed and that investment in Tokens entails risk due to the effect on the Tokens or the ICO of any decision of a court or public authority, any other possible change in regulation or doctrine and administrative practice after the date this White Paper was published.

a. Offering and trading risks

It is possible that the Token in question may not be listed on any secondary market or that there may be a lack of liquidity in OTC (Over-The-Counter) markets.

The Token Issuer is not liable for any fluctuations in any market rate or types of market allowing the Token to be traded, which may entail illiquidity risks. Even if the Token is listed on a third-party platform, such platforms may not have sufficient liquidity or may be subject to regulatory or compliance changes and may be susceptible to failure, crash or manipulation.

In addition, to the extent that a third party platform lists the Token in question, giving an exchange value to the Token (whether in cryptocurrencies or fiat money), such value may suffer volatilities. In addition, to the extent that a third-party platform lists the Token in question, granting an exchange value to the Token (either in cryptocurrencies or fiat money), such value may suffer volatilities. Investors in this type of asset assume all risks associated, including the risks mentioned above and those resulting from speculation.

b. Risks associated with the execution of the project and the Issuer

- Forward-looking information risk

This document contains forward-looking information, including financial and business growth forecasts for the project. Such forward-looking information is based on what Alvearium believes to be purely rational criteria, and should under no circumstances be construed to be certain, definite or real. Alvearium's future prospects may be affected by any adverse or unforeseen circumstances.

- Risk associated with diverse regulations and future changes in regulations

The limited regulation of blockchain technology and the varying regulations in different jurisdictions constitute risks. These risks are associated both with the diversity of regulations applicable and with new legislation coming into force in different jurisdictions. Risks stemming from new regulations include the modification or termination of smart contracts, or the loss of Token functionality or Token value for investors.

There is no guarantee regarding the impact on the price or usability of the Tokens caused by any ruling by a court or public authority, any other possible change in regulations, doctrine or administrative practice after the date this White Paper was published.

- Risks of project failure or abandonment

The implementation of the project described herein may be disrupted and cease for a variety of reasons, including, but not limited to, lack of market interest, lack of funding and lack of commercial success (e.g. caused by other competing projects). There is no guarantee that the milestones set out in this document will be fully or partially achieved or that Token Buyers will make a profit.

- Competitive risks

Competition from other companies providing similar services in the market may have a negative impact on the progress of the project described herein, as well as on the Token value.

c. Tokens and technology risks

- Technology risks

Cryptographic Tokens are based on a newly developed technology, which is still in the testing phase, therefore there are risks associated with the technology, including those associated with their purchase, storage, transfer and use. The nature of the risks associated with the technology underpinning the Tokens covers a wide range of risks. Given that this technology is still in development, there may be risks that are not foreseeable at the time this White Paper was drafted and which, if these risks were to materialise, could lead to unforeseen variations..

- Volatility risks

Such products have a high implicit risk, owing to the history and fluctuations in their value. The value of Tokens can go up and down, and there is a risk that Buyers may not recover their initial capital invested.

- Tax regime risks

Tax regulations are very limited when it comes to crypto-assets, which means that the taxation of the Tokens issued in this ICO may be subject to future rulings or legislative amendments. Any such changes may also depend on the individual circumstances of each Token Buyer.

- Software risks

The computer codes (smart contracts) by which Tokens are transmitted will be based on Polygon. Any malfunction, crash or discontinuation of the Polygon project may have adverse effects on the functioning of the Tokens and on the project described herein.

Technological advances in general and particularly in cryptography, such as the development of quantum computing, may have adverse effects on the functioning of Tokens.

Smart contracts and the software on which the Tokens are based are at an early stage of development. There is no guarantee or way to ensure that the issuance of Tokens and their subsequent trading will not be disrupted or otherwise be subject to any kind of error, so there is an inherent risk of defects, flaws and vulnerabilities that may result in the loss of the initial capital provided or Tokens purchased.

There is also a risk of hacker attacks on the technological infrastructure used by the Issuer and on the networks and technologies used.

The Issuer of the Tokens may find itself temporarily or permanently unable to conduct its business.

At the time this White Paper was drafted, the plan is to use the Polygon blockchain, without prejudice to the choice of the blockchain network that best suits Alvearium's needs at a later date.

In the case of Polygon's proof-of-work consensus mechanisms, this might be the case if someone is able to control more than 50% of the computing power of the blockchain miners in a so-called 51% attack, and therefore takes control of the network (the blockchain). By using more than 50% of the mining power (hash power), the attacker will always represent the majority, which means that they can enforce their version of the blockchain.

In theory, this is also possible with less than 51% of the mining power. Once an attacker has gained control of the network, they could reverse or redirect transactions they initiated, thus making it possible to double-spend (i.e. perform multiple transactions of the same Token). The attacker could also block other people's transactions by denying confirmation.

There may be additional cyberattacks on Polygon's blockchain, software and hardware used by the Issuer. Besides attacks by hackers, there is a risk that the Issuer's employees or third parties could sabotage the IT systems, which could result in the failure of the Issuer's hardware and software systems. This could potentially also have a negative impact on the Issuer's business activities.

- Risks of custody and loss of private keys

Purchasers of Tokens from the Issuer acknowledge, understand and accept that, if their private key or password to the Tokens obtained and associated with any digital wallet compatible with the Polygon blockchain is lost or stolen, they may permanently lose access to their Tokens. Furthermore, any third party with access to the private key could improperly appropriate the Tokens contained in the digital wallet. Any error or malfunction caused by or related to the digital wallet or to the Token storage system in which Buyers wish to receive their Tokens may also entail the loss of their Tokens.

- Risk of theft

Smart contracts and the software platform on which they run may be vulnerable to cyberattacks or hacks by third parties. These may include, but are not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smurfing and spoofing. Any of these attacks could result in the loss of capital contributed by the Buyer or of the Tokens purchased, as well as making it impossible for the Issuer to continue with the development of the project defined in this document.

- Risk of incompatibility of digital portfolio services.

The digital wallet service provider used to receive Tokens must be compliant with the ERC-20 standard. The compatibility of digital wallet services is not guaranteed and there is a risk that, if there is incompatibility, the purchased will not be able to access the Tokens.

5.4 Terms and conditions

Token Buyers acknowledge and agree that these GENERAL TERMS AND CONDITIONS OF SUBSCRIPTION FOR THE ISSUANCE OF ALVEARIUM TOKENS included in this White Paper are supplemented by Alvearium's GENERAL TERMS AND CONDITIONS OF SERVICES available at **www.alvearium.io/terms-conditions**

Token Buyers acknowledge that they have read, understood, and agree to Alvearium's GENERAL TERMS AND CONDITIONS OF SERVICES, given that their acceptance is necessary both for the purchase of Tokens and for registering as a user on Alvearium's website.

The complete contents of the White Paper and these Terms and Conditions can be found on Alvearium's website:https://.alvearium.io/terms-conditions. The Buyer acknowledges and agrees that their purchase of Tokens is pursuant to and in accordance with the terms and conditions described in the White Paper and the Terms and Conditions on Alvearium's website.

These Terms and Conditions are not to be considered an offer or solicitation to subscribe for, purchase or otherwise acquire the Tokens, nor shall they be of any effect or validity for Buyers in any jurisdiction:

- in which such offer or invitation is not authorised; or

- in which the person making this offer is not qualified to do so; or

- in which it is unlawful for the Buyer to accept such an offer or invitation.

The Buyer should not construe the contents of these Terms and Conditions to constitute legal, business or tax advice. Before accepting them, the Buyer should seek such legal, tax and business advice as may be necessary to fully understand the project and these Terms and Conditions.

The content of the Alvearium website or any website linked to it, directly or indirectly, does not form part of these Terms and Conditions. The Buyer should only take into account the contents of this White Paper and the Terms and Conditions in making a decision to purchase Tokens, irrespective of any other content, including any content available on the Alvearium website.

a) Entry into force and amendments

These Terms and Conditions shall become enter into force when the Buyer accepts the Terms and Conditions by clicking on the "I have read and accept the Terms and Conditions" button on the website.

In compliance with the provisions of article 28 of Spanish Law 34/2002 of 11 July 2002 on Information Society Services and Electronic Commerce, within a maximum period of twenty-four hours from the entry into force of the Terms and Conditions, Alvearium will confirm the acceptance of these Terms and Conditions, confirming their entry into force.

b) Object

The Buyer, in exchange for payment, will receive a number of Tokens which will be delivered and unlocked in accordance with section 2.7 of this White Paper.

c) Buyer rights and obligations

- In order to purchase Tokens, the Buyer must be verified by the Issuer. In order to be verified, the Buyer is required to go through the KYC and AML (Know Your Customer / Anti-Money Laundering) process.

- The Buyer may only purchase Tokens if he/she has sufficient legal capacity and capacity to assume the rights and obligations set out in these Terms and Conditions.

- The Buyer undertakes to pay the price of the Tokens in flat currency by any of the payment methods offered by the Issuer.

- The Buyer agrees to comply with the rules of conduct and navigation of the Issuer's website, as well as with the terms and conditions.

- The Buyer undertakes to act in good faith at all times.

- Buyers make purchases on their own behalf, in their own name, acting under their own responsibility and on their own initiative, without their purchase decision being influenced by or deriving from any advisory activity of the Issuer. The Buyer agrees not to purchase Tokens on behalf of a third party, or for the purposes of distribution or resale.

- Buyers acknowledge that they have sufficient knowledge and experience in financial and business matters and that they are able to assess the risks and rewards of agreeing to these Terms and Conditions and to adhere to their rights and obligations. Furthermore, Buyers also declare that they are financially able to withstand the risk of loss of value of the Tokens they purchase, and that they are therefore able to accept the risk of loss of value of the Tokens they purchase.

- The Buyer agrees to the present document with the expectation that he/she can benefit from the functionalities of the Issuer's website as set out above.

- Nevertheless, the Buyer acknowledges and accepts that the development of the project will be subject to uncertainties and risks that may affect the feasibility and usability of the functionalities, including those of the project.

- If the Buyer decides to file a lawsuit against the Issuer in court on the basis of the information contained in this document, the Buyer undertakes, to the extent permitted by applicable law, to pay for the costs of translation of the document, if necessary, before any legal proceedings are commenced.

d) Rights and obligations of the Issuer

The Issuer assumes responsibility for the contents of this White Paper and these Terms and Conditions and states that it has taken all reasonable care and that, to the best of its knowledge, the information contained in this document is correct and accurate and that it has not omitted important data.

The Tokens functionalities are detailed in section 3.3 of this document. In addition, the Issuer aims to increase the Tokens functionalities in line with the needs of and for the benefit of Buyers.

The White Paper and these Terms and Conditions constitute an obligation for the Issuer, without prejudice to any limitations that may be imposed by applicable law (for instance, bankruptcy or insolvency).

Although not yet in force, the Issuer has sought to align this document as far as possible with the Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Markets in Crypto-assets, and amending Directive (EU) 2019/1937.

The Issuer hereby declares that it is a duly incorporated company in good standing under Spanish law and has sufficient authorisation and capacity to conduct its activities in accordance with the provisions of this document.

e) Fees and taxes

Fees and taxes will be paid pursuant to prevailing applicable regulations.

f) Exchange rates

All monetary values stated in this document are expressed in US dollars (USD). The official exchange rates of the European Central Bank at the time of each exchange will be used to calculate values in Euros.

g) Prevention of money laundering and terrorism financing

The issuance of the Tokens is subject to Spanish Act 10/2010, of April 28, 2010, for the Prevention of Money Laundering and Terrorist Financing. Specifically, Article 2, 1. z) includes the Token Issuer as being subject to the scope of application of the law.

h) In accordance with Spanish Act 10/2010, of April 28, 2010, for the Prevention of Money Laundering and Terrorist Financing, the Issuer is obliged to identify the Buyer, to gather information on the nature of their professional or business activity and to report, on its own

initiative, to The Spanish Executive Service of the Commission for the Prevention of Money Laundering and Monetary Offences any matter, event or transaction, even a tentative one, which is suspected or known to be related to money laundering or terrorist financing.

i) The processing of personal data will be carried out in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), and to Spanish Organic Law 3/2018, of December 5, on the Protection of Personal Data and Guarantee of Digital Rights.

The Buyer declares that the Privacy Policy of the Issuer's website has been accepted prior to the acceptance of these Terms and Conditions. The complete Privacy Policy is accessible at the following link **https://alvearium.io/privacy**

j) Partial nullity

If any provision of these Terms and Conditions is found to be invalid by a court of competent jurisdiction, it shall be severed without affecting the remainder of these Terms and Conditions, the remaining provisions shall continue to be valid and enforceable.

k) Applicable law and jurisdiction

Any Buyer dispute or claim arising from, or related to these Terms and Conditions will be governed by Spanish law. Any legal claim will be brought before the courts of the city of Zaragoza, with the Buyer expressly waiving any other jurisdiction; all without prejudice to any applicable overriding law.

5.5 Notices

Notice to EU/EEA residents

The Token described in this White Paper is neither a security nor a financial instrument as defined in the Markets in Financial Instruments Directive (MiFID II) of the European Parliament (2014/65/EU), securities or other laws of the member states. The Token is not a security of any kind and does not represent any voting, management or profit-sharing rights in any entity. The Token does not represent ownership of any physical asset and will not be redeemable.

Notice to residents of Australia

The Token offering and issuance have not been registered under the U.S. Securities Act of 1933, as amended, or under the securities laws of certain states. The Token may not be offered, sold or otherwise transferred, pledged or hypothecated, except to the

extent permitted by the Law and applicable state securities laws pursuant to an effective registration statement or an exemption therefrom.

Aviso a los residentes de Australia

No Simple Agreement for Future Token (SAFT), placement document, prospectus, product disclosure statement or other disclosure has been lodged with the Australian Securities and Investments Commission in connection with the offering. The SAFT and any documents used in connection with it and any related documents do not constitute a prospectus, product disclosure statement or other disclosure documents under the Corporations Act 2001. In Australia, someone may only offer the Token to "sophisticated investors" or "professional investors" or otherwise in accordance with one or more exemptions contained in the Corporations Act, so it is lawful to offer the Token in compliance with applicable laws.

Notice to residents of the Republic of China

The Token Rights are not offered or sold and may not be offered or sold, directly or indirectly, within the People's Republic of China, unless this is expressly permitted by the People's Republic of China laws and regulations.

Notice to residents of Japan

The Token has not been and will not be registered under the securities or financial laws of Japan. Prospective Buyers of the Token undertake not to re-transfer or re-allocate the Token to anyone who is a resident of Japan, except pursuant to a private placement exemption from registration requirements and in accordance with the relevant laws and regulations of Japan.

Notice to residents of the Russian Federation

The SAFT and any related documents are not an offer, or an invitation to make offers, to sell, purchase, exchange, or otherwise transfer foreign securities or financial instruments to or for the benefit of any person or entity resident, incorporated, established or that usually resides in the Russian Federation. The SAFT and any documents used in connection with the offering and issuance of the Token are not advertisements related to the placement of securities or public circulation as laid down in Russian law. The Token is not intended for public placement or circulation in the Russian Federation. Neither the SAFT nor any other related document has been or will be registered with the Central Bank of the Russian Federation.

Notice to residents of Switzerland

The Token may not be publicly offered in Switzerland and will not be listed on the Swiss stock exchanges or any other regulated stock exchange or trading venue in Switzerland. The SAFT and any related documents have been prepared without regard to the disclosure rules for the issuance of prospectuses under the Swiss Code of Obligations or the disclosure rules for listing prospectuses. Neither the SAFT nor any related marketing material may

be publicly distributed or made available to the public in Switzerland. The SAFT and any related marketing materials have not been and will not be submitted to or approved by any Swiss regulatory authority, principally the Swiss Financial Market Supervisory Authority. The offering and sale of Tokens has not been authorised by the Swiss Federal Act on Collective Investment Schemes.

Notice to UK residents

In the United Kingdom, the SAFT is distributed to and directed only (and any purchase activity to which it relates will be carried on only with investment professionals) within the meaning of Article 19(5) of the Financial Promotion Order (the "FPO"); (ii) persons or entities of the type described in Article 49 of the FPO; (iii) certified sophisticated investors (within the meaning of Article 50(1) of the FPO); and (iv) other persons to whom it may otherwise lawfully be communicated (all such persons being collectively referred to as "relevant persons"). Persons who are not relevant persons must not take any action in connection with the SAFT or based on any document used in connection with the SAFT. It is a condition of acquiring the Token that the person demonstrates that he or she is a relevant person. The SAFT and the documents used in connection with it have not been approved by any UK regulatory authority.

Notice to residents of all jurisdictions

No actions have been taken to permit the offer, sale, possession or distribution of the Token or any related document in any jurisdiction in which it actions to that end are required. You are obligated to inform yourself of and observe any restrictions relating to the offering of the Token, the SAFT and any related documents in your jurisdiction.

No financial return is contemplated on the purchase of the Token, and you should not purchase the Token for speculative purposes. Participation in the sale of the Token should not have any expectation of profit, dividends, capital gains, financial return or any other return, payment or income of any kind. The purchase of the Token involves substantial risk that could lead to a loss.

There is no guarantee that targets will be met or that Tokens will always have or maintain their value within the ecosystem. Any resale of the Token must be made for exemptions from securities requirements and in compliance with the requirements of applicable laws.

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