EARTHMETA

WHITE PAPER

ABSTRACT

EarthMeta represents an **echo** of the Earth as we know it today. It is a **perfect digital duplicate** of the Earth, including its seas, continents, and cities. It provides rich detail down to exact boundaries, streets, monuments, and famous landmarks. The platform contains all the **metadata** necessary to reproduce the Earth exactly as it appears in the physical world.

EarthMeta aims to revolutionize **digital real estate** by developing a new global ecosystem dedicated to trading assets as NFTs, which is **simple** and **efficient.** But most importantly, it offers a **transparent platform fully decentralized established on blockchain technology**

At launch, most cities throughout the world will be available for pre-sale in EarthMeta. Users will be able to simply buy the city of their choice to become a Governor. They can then divide each city into assets (NFT landmarks, monuments, buildings, administrations...) and trade them on our marketplace. This will allow the Governor to earn **1% tax** on each subsequent transaction made in their city. The Governor with the highest valued assets in each country will be named President and have the opportunity to receive even more taxes.

Earn rewards from our Staking pool and profits from collecting cities. Create unique experiences with our Augmented Reality App. Run your own economy with our APIs. And ensure your voice matters by partic-ipating in EarthMeta decisions with our Decentralized Autonomous Organisation (DAO).

With continuous demand and a limited supply of cities, EarthMeta aims to become one of the most **attractive** digital real estate platforms available today.

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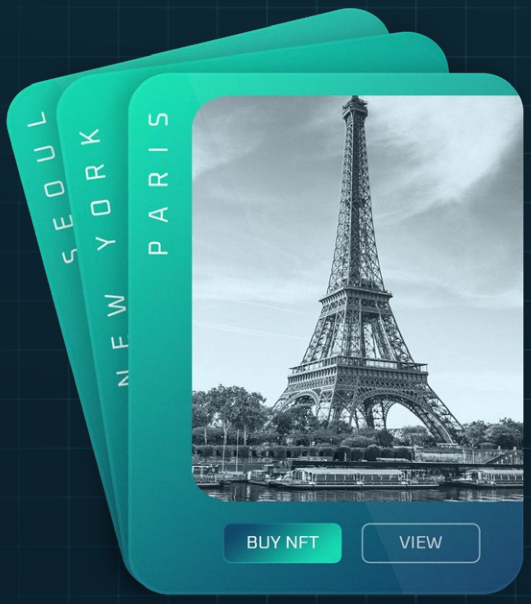
INTRODUCING EARTHMETA

EarthMeta Overview

EarthMeta is a virtual copy of the Earth and its geographic features. This digitized representation has been developed with the same depth and detail as the real world to provide an experience similar to reality, where people can have fun, express themselves, and earn money.



The virtual Earth is divided into digital cities. When you buy a city in EarthMeta, you own on the platform just like you would hold natural land on the physical Earth. Owning land in EarthMeta then enables you to sell your land to other users and trade your NFT assets on the platform.

After connecting to the platform, anyone will be able to buy, sell and trade cities during a presale. The price of these cities will vary depending on factors such as their location, notoriety, GDP, etc. (see City distribution)

After the presale, the governor (city owner) of each city will be able to divide their city as desired into a multitude of digital assets such as monuments, landmarks, and administrations. After this subdivision, governors will then be able to sell their assets on the EarthMeta marketplace (see Land).

Shortly after launch, EarthMeta will deploy the power of AR/VR to allow users to **move freely around the virtual planet.** This will empower governors to **develop their own economy** and owners to **benefit from all the platform's powerful tools.**

Vision

Our goal is to build a high quality, decentralized ecosystem that offers access to a virtual world. We want this virtual environment to be so rich, it feels **interchangeable with the physical environment**.

Our welcoming, **transparent**, challenging, rewarding, and fully functional platform will allow us to continually attract and retain new users.

Mission

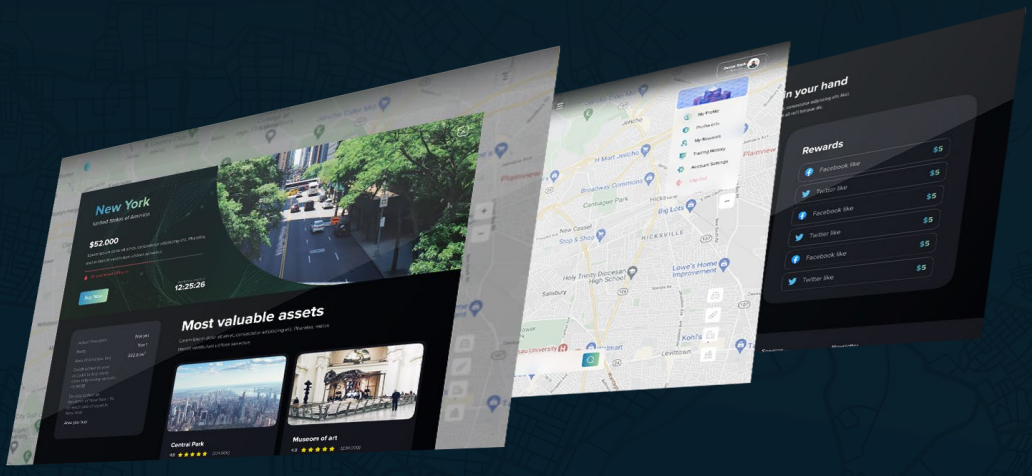
EarthMeta has developed a set of smart tools that complete a **truly decentralized ecosystem** where users are rewarded for their engagement and contributions.

We give meaning and depth to our platform by integrating the virtual world into our reality and giving life to the Virtual Earth.

We designed a system in which Governors will be able to create, share, and communicate without central control while benefiting from blockchain and having the ability to make passive income through our tax plan (see Tax Plan)

People are conditioned to and need a meaningful world with purpose, quests, possibilities, and evolution. Therefore, we believe that it will be much easier for users to engage in a world that contains the same depth as the physical world.

We believe it's possible to drive an all-in-one project. EarthMeta was designed as a **technology**, **game**, and **community-based platform** that also provides radical **transparency**.

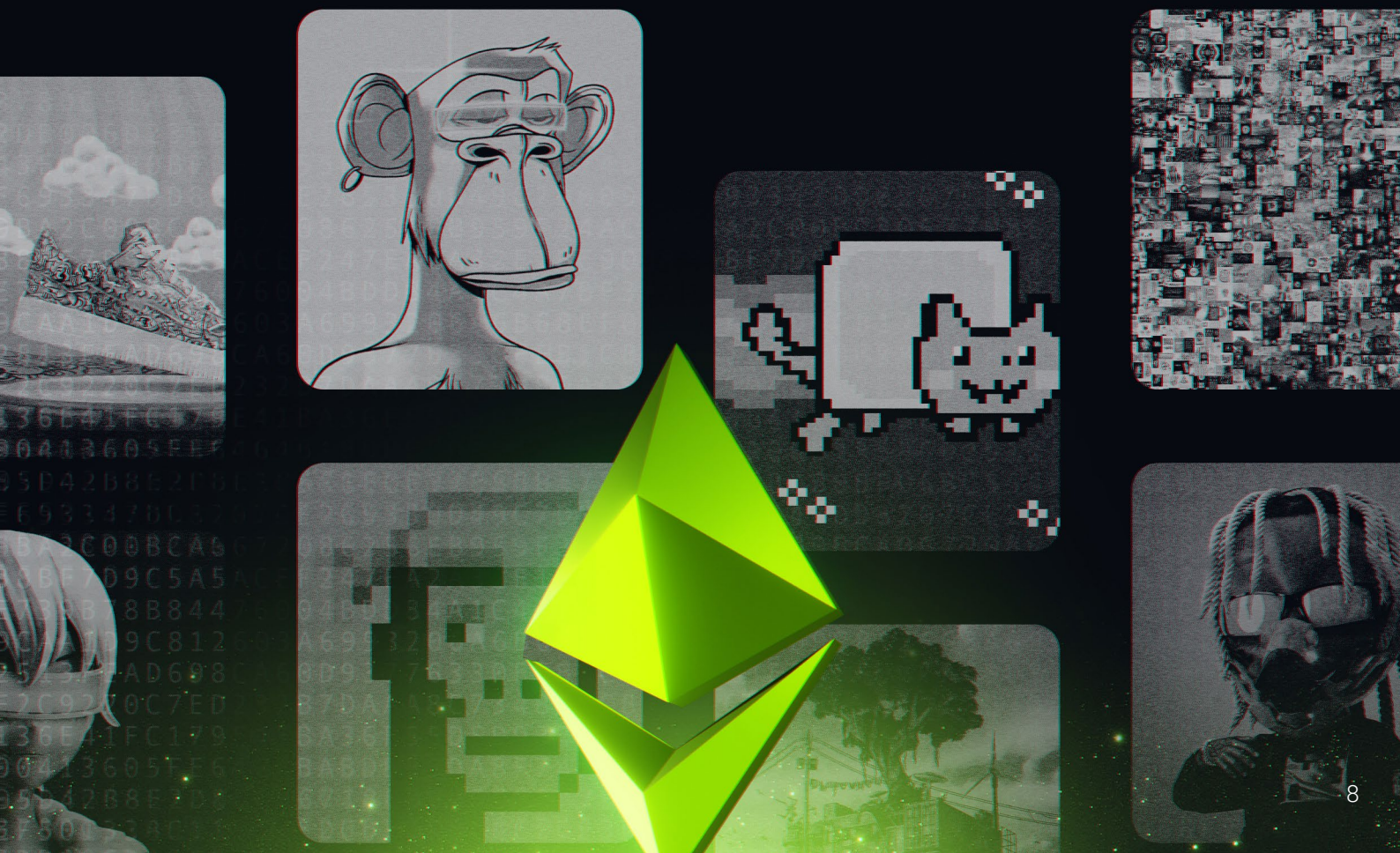


Market

EarthMeta is well-positioned in a rapidly expanding market, with projections indicating substantial growth in the coming years. According to Earthweb, the global metaverse market is expected to soar from $61.8 billion in 2022 to an impressive $426.9 billion by 2027, showcasing a remarkable compound annual growth rate (CAGR) of 47.2%. This market surge is being driven by increasing adoption of digital experiences, with over 400 million monthly active users already engaged in the metaverse ecosystem. Additionally, Statista forecasts a significant CAGR growth of 36.7%, leading to a projected market value of $490.4 billion by 2030. These figures indicate a thriving landscape ripe with opportunities for EarthMeta.

Market insights from McKinsey & Company paint an even more promising picture, predicting that the metaverse economy could reach a staggering $5 trillion by 2030. This estimation is supported by the substantial investments pouring into the metaverse, surpassing $120 billion in 2022, more than doubling the previous year's figure. As the metaverse continues to evolve, McKinsey anticipates that over 50% of live events will migrate to this digital realm by 2030, with over 80% of commerce feeling its impact. With an anticipated annual growth rate of 37.73% from 2024 to 2030, the metaverse market is projected to reach a staggering $507.8 billion by the end of the decade. These statistics underscore the immense growth potential and promising prospects that EarthMeta stands to benefit from in the burgeoning metaverse landscape.

The United States emerges as a significant player in this market, generating the most value in the Metaverse market in 2024, with a projected market volume of $23.0 billion. By 2030, the number of users in the Metaverse market is expected to skyrocket to 2.6 billion, highlighting the widespread adoption and increasing relevance of digital experiences in the modern era.



GOVERNANCE SYSTEM

The Governor

The buyer of a city will have the status of "Governor" on our platform. The Governor will then own that city and oversee the assets in circulation in their city, whether they want to sell them or not. Once purchased, the city will no longer belong to the EarthMeta team, and we will have no power over that region.

How Do I Become A Governor?

The only way to become Governor is to claim and purchase a city (no matter its size).
You will become a Governor if you own at least one city. You can acquire the city at the beginning for the mint price according to the Tier of the city. Cities can be purchased later at the owner's price.

You can become the governor of as many cities as you claim. For each city you claim and purchase, you will be granted ownership of that city in the form of an NFT.

Governors will have rights because they adhere to our long-term project. On EarthMeta, city owners can earn rewards for each asset they hold.

→ Governor Taxes

The main interest in buying a city and being a Governor in EarthMeta lies in the unexpected value created by your city claim. When you claim a city and become Governor, you are entitled to a **1% royalty on any transaction** that takes place within the city. You can also sell the assets in the city while preserving your status as governor, which multiplies the value of your purchase from **day one**.

Each city will be developed to allow Governors to sell any asset (buildings, streets, monuments, entities...) at the price and currency of their choosing.

So, even if Governors decide to keep their cities because they believe that their value will increase, they will be able to sell all or some of their assets while retaining the overall ownership of their city.

If, as a governor, you choose to sell your land assets, you can list them on the marketplace. Once sold, you will still receive 1% of any subsequent sales.

This means that as long as you remain a governor and do not sell your city or cities, you will receive 1% **directly** into your wallet for **each** transaction made in your city.

If you decide you sell your city, the new governor will take over and receive the 1% tax.

This 1% tax will be collected automatically in the blockchain.

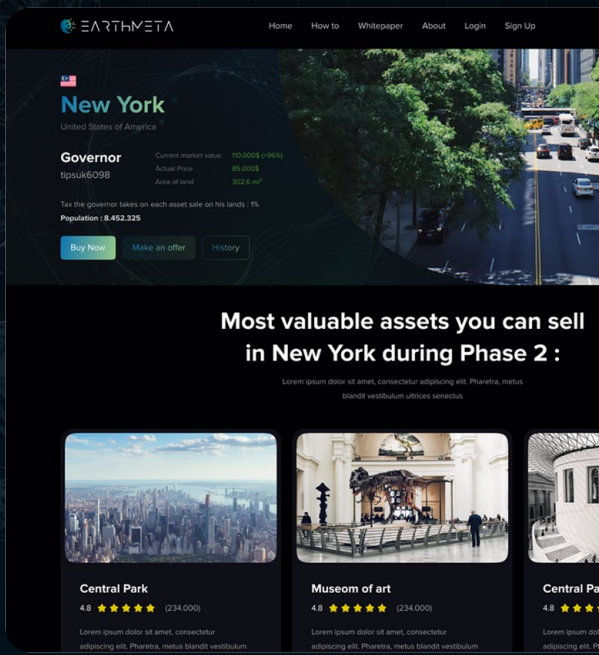
→ Asset Valuation Increases

How can you create scarcity with an infinite amount of land as is the case with other virtual projects? It would be impossible to create buying pressure and increase the value of the properties. If a developer creates a project with trillions of square sections, they are not doing it for the sake of their community, but rather for their own interest.

EarthMeta addresses this problem by having a **limited** number of assets (cities) that will be sold during the presale for a fair price (see City pricing). This enables city owners (Governors) to choose whether to develop or sell the city they acquired at the price they think is right.

With this innovative approach, EarthMeta's NFT can only grow over time based on the proven concepts of **market pressure** and **scarcity.** This will be accomplished by :

- Avoiding the sale of oceans/seas.
- Reducing the total number of assets.
- Helping governors create unique assets: city histories, villages, notoriety, monuments, etc.
- Allowing owners to value their assets.



On the technical side, EarthMeta maintains a **large data infrastructure** that will allow its governors to have accurate information about each asset and make decisions efficiently according to the market. It will include all the data an owner needs to evaluate the market, make the best decisions in their interest, and value their assets. In addition, an API for each governor will also be made available (see APIs interface) to allow them to create their economy.

The EarthMeta platform will guide each city owner in selling their assets directly after the pre-sale during the public launch. In addition to guiding them through the selling process, EarthMeta invests heavily in targeted and effective marketing operations to attract and retain new members and increase demand on the assets while keeping the supply low to create friction.

→ Benefit From Advanced Marketing

The Metaverse is no longer a "virtual" reality for businesses - it's the future.

We know that the development of the metaverse is an advantage for companies, administrations, and celebrities. Our project will help you target your city and make it more valuable.

Typically, when you click on a place sold in other virtual projects, it redirects you to someone's profile and a history of transactions. In EarthMeta, it will redirect the user to the city page directly and provide a detailed, customizable information page set by the Governor.

This page will display when someone clicks on the city they own: they can write whatever they want. Governors can use this space for marketing, promotional, political, or other messages: When people click on the city, that's the first thing they'll see.

Metaverse worlds will give businesses the opportunity to build personalized and sustained relationships with customers and develop immersive experiences to promote their services and offerings effectively. Plus, they can better impact customers using interactive and realistic marketing content rather than relying on digital marketing tactics.

The President

The governor in each country who has the highest total asset value (cities in $) will be given the title of President.

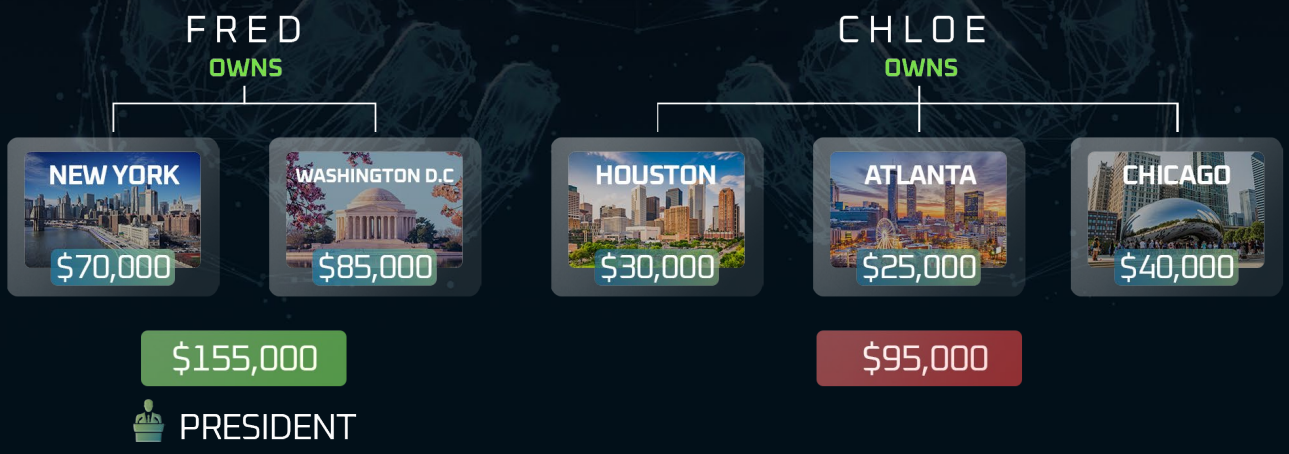
The purpose of having a president is to create buying pressure and competition among the governors and push them to buy more land. This choice will make each city even more valuable.

How do I Become a President?

Becoming President is simple: Own the most strategic/critical cities in a country.

To become President, you must first be the governor of one or more cities. Any country in which no city has been purchased thus cannot have a president. Logically, the first governor of each country (holder of a city) **will be the country's first president.**

EarthMeta smart contracts will automatically grant the status of the President to the rightful person. Essentially, this will be the governor with the most wealth in the country: the cumulative value of their assets must exceed the cumulative value of the assets of all other governors in the same country.
Example:



Although Chloe has more cities, Fred will be appointed President of the United States. As you can see, becoming President does not depend on the number of assets owned but on the value of those assets. The cumulative value of the assets acquired will be calculated automatically and exclusively in USDT.

The title of President is not permanent. It can be revoked at any time if another person achieves a higher cumulative value in the country. Therefore, a Country is an NFT but cannot be acquired in the same way as a City.

There are one hundred ninety-two countries in the world. This means that EarthMeta will have 192 presidents.

→ Presidential Taxes

When you become President, in addition to earning a 1% tax on every asset sold in your cities, you will also earn an **additional 0.5% tax** on any transaction made by all inhabitants of your digital country. You will receive the 0.5% **directly in your wallet** for all applicable transactions made within your country.

For example, if you are President of the USA and the Statue of Liberty is sold, even if you do not own New York, you will receive a 0.5% royalty on the sale. On the other hand, if you own Washington and the White House is sold, you will receive not just 1%, but 1.5% in royalty.

→ Reshape the Country in Your Image

While they are referred to initially as Presidents, these leaders will have the power to change their status at any time. They can be King, Dictator, President, Emperor, or any other title and will have the power to create the political system for their country.

Along with choosing your desired title, you will also have the right to choose your country's flag. The President will be allowed to choose an existing flag, such as the flag of South Korea, Italy, Brazil, etc. or create a new one. Make it your own, have it symbolize your values, and create your country's history.

Governor and President: Differences and Exceptions

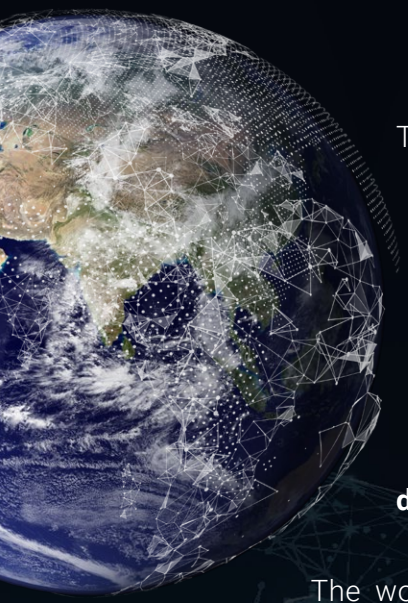
In the case of city-states, the Governor will also be the President. This occurs in countries that have only one city. Examples of this include **Vatican City, Monaco, Hong Kong, Gibraltar, and the continent of Antarctica.**

Therefore, in these cases the governor will automatically be President and will incur the 1.5% royalty on each asset sold in their territory until the sale of their NFT City.

WHY EARTHMETA

Each owner of an NFT City becomes a valued member of the EarthMeta Community, as well as the ecosystem that embodies it. The NFTs that make up EarthMeta then become an authentic collection of organisms in the blockchain.

The Earth



"The Fusion Between The Virtual And The Real World."

The Metaverse dominates the digital debate today. However, the Metaverse must first be a **parallel** world to ours. We have learned from undeniable concerns that plague other Metaverse projects that duplicate our Earth. We are here to open your eyes to the deceptions often used and guide you to the best possible future Metaverse.

The Earth is round; we all know it (sorry to the defenders of the flat-earth theory). To make it flat or make it a perfect rectangle, geographers are forced to **distort it, making it less real and believable**.

The world map as we know it is a flattened representation of a sphere, which will necessarily imply, whatever the chosen projection, deformations. Given these deformations, selling squares of the same size is not as simple as it might seem.

Geographers have invented new ways of representing the world according to need throughout history. For example, the Mercator projection is used mainly for navigation because it preserves the angles, but it vastly distorts the distances and areas of land. Today, it is the most used map of the world.

If it is possible presumptively to sell a perfect square of the Earth in a virtual world, it is not possible in the actual world. We realized that dividing the Earth digitally into trillions of small forms like squares, rectangles, or hexagons that are **100% equal** is impossible because the Earth is not a perfect square or rectangle. The map as we know it is distorted. The countries on the equator appear much smaller than they are. That is to say that a 1x1m square projected on a map in South Korea does not equal 1x1m projected on a map in South Africa which does not equal 1x1m projected on a map in Canada.

EarthMeta's primary objective is to blur the lines between the real and the virtual. Therefore, the first and most significant improvement in EarthMeta is its calculations that maintain the correct dimensions of the angles and land areas of the Earth.

Thanks to our combined geospatial research and expertise, we eliminated distortions by creating carbon copy delimitations of the Earth. This means that buying an asset in EarthMeta will be the closest virtual experience to the real world; you won't be buying a square in the blockchain but rather an accurate projection of an asset in the real world with architectural, geographical, and historical characteristics.

EarthMeta uses the fairest, most most trustworthy division of the Earth. It is simply the most honest.

Borders

Have you ever seen a person buy a perfectly square piece of land in real life? Of course not! Other Metaverse projects use perfect forms like squares, rectangles, or hexagons simply because they are most straightforward to code and implement. It's understandable to look for simplicity, but if they prioritize simplicity, the experience will never feel realistic and detailed.

Our physical Earth has winding, naturally formed borders that developed geographically and politically over time.
These borders can be natural according to the geography of a territory, like the crest of a mountain or a river (like the Ban Gioc falls that separate Vietnam and China). But they can also be man-made, for example, between Canada and the United States. These man-made borders are sometimes marked with a ruler, and in the case of some African countries, they were indeed drawn with a ruler during the colonial times. Also, the development of the situation in Ukraine might result in establishing new borders, which only goes to show how political borders can change and reshape the world.

"Earthmeta Create The End From The Present"

For us, the future does not stop at a simplified world lacking in detail. History repeats itself continuously while evolving, be it economically or politically. From our point of view, it's impossible to remove everything we know in order to recreate everything again. So we build from what we know and both allow and expect t to evolve rapidly as technology changes everything.

In the present, there are delimitations made between cities, countries, and continents, whether natural barriers, geographical frontiers, etc. If we want to recreate the earth as we know it, we can't ignore the elements that make earth the home we all know.

Our team will bring research, coding expertise, and innovation together to achieve this. As a result, EarthMeta will have the same borders as we know them today. Each continent in EarthMeta will be divided into countries that already exist. Likewise, each country will be divided into cities that we know too, and each city will be divided into land parcels (see land).

Oceans, Seas, and Rivers

Earlier, we mentioned that seas and oceans will not be sold. But why not use these features to create more profit for metaverse developers?
In total, 71% of the Earth's surface is made up of oceans, seas, and rivers. This means that only 29% of the earth is land. In theory, selling these areas would be very lucrative for the platform developers as it will create 70% more profit. The main purpose of selling oceans and seas in a virtual world would be to take advantage of the Earth's full available surface.

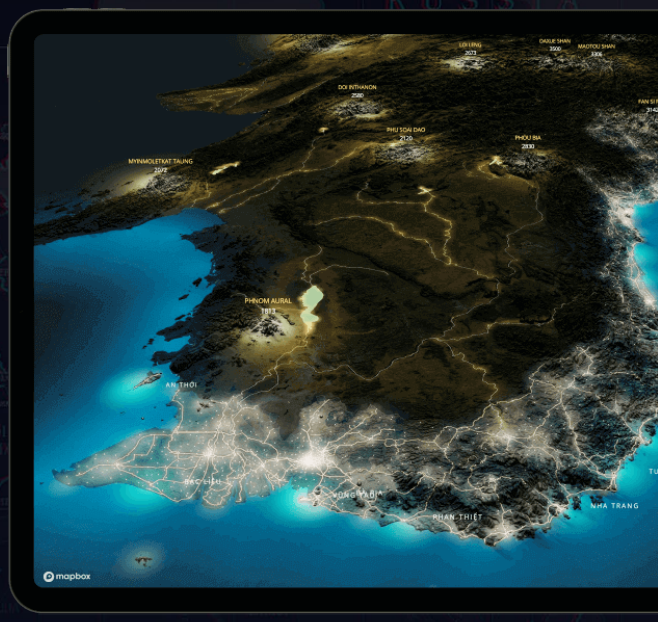
However, selling these would generate the opposite effect for buyers, since it would mean subtracting 70% of scarcity (and therefore value) of their assets. As a result, the market would be saturated with useless and unprofitable assets, lowering the buying pressure and thus the median price of assets.

In the real world, oceans and seas are considered **global commons**. International waters are a vast space of freedom. It's a bit like the atmosphere or space - vast, wild, and empty of human population. We all have the freedom to use it, and no one has to pay for it.

The principle of freedom prevails on the oceans and seas, and we will not change this because it is not in the interest of EarthMeta members to do so.

Selling oceans, seas, and any other waters would go against the interests of the members who the EarthMeta team strive to protect as a community-driven project.

The Map



For the development of EarthMeta, we are using Mapbox, which specializes in online mapping.

MapBox is an excellent alternative to Google Earth. It is cheaper and presents the perfect platform for development. By using MapBox, EarthMeta will benefit from more traffic (more users) without any significant impact on the price.

In the long term, as we develop and gamify the platform, EarthMeta will need the robust and accurate routing engines that MapBox offers to create unique experiences that appeal to our users.

MapBox is a very scalable and up-to-date solution used by big names in the industry. While it is currently the best solution, we will continue to monitor other solutions as we develop the platform and technology advances.

New Technologies

EarthMeta is a platform that brings together major known technologies such as big data information and artificial intelligence calculations.

The project will also benefit from AR technology with the release of an AR application and the creation of the gateway between EarthMeta AR & VR applications.

We will use the governance mechanisms of the decentralized autonomous organization (DAO) working through the set of smart contracts that will allow for following our governance mechanisms. This will be done to ensure an incorruptible organization that belongs to the users who helped create and finance each city and whose rules are public. Additionally, we will allow each governor to create their own currency for their assets.

ECOSYSTEM

Presale - Launch

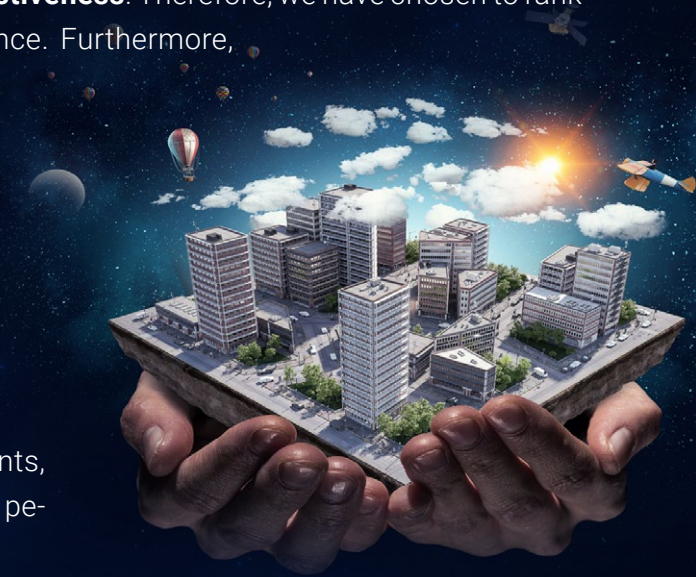
"We have reached a new generation Of Metaverse that allows you to buy digital assets in the World's most valuable places."

The presale will have two objectives :

- For our first governors, the presale will serve to ensure a **strategic** advantage by having the opportunity, before anyone else, to access the sale of cities below the market price that will result after the presale. As the first users, they will also have early access to our ecosystem. Their feedback will be the first to be used in the development of EarthMeta.
- For EarthMeta, we will use this presale to raise funds to ensure that the subsequent phases run smoothly.

City Distribution

The fundamental valuation of each city depends on its **attractiveness**. Therefore, we have chosen to rank cities not by national influence but by international influence. Furthermore, these cities will be **classified** into several categories.



The value of each city will depend on :

» Population: The more populated a city is, the more people will want to buy it;
» City GDP: GDP is a precise and critical indicator that measures the wealth created by all agents, private and public, in a given territory during a given period;
» Tourism: The notoriety measured by the number of tourists visiting the city;
» Religious Influence: Cities with a solid religious connotation are known and offer higher visibility.

Tier 1 Cities

Tier 1 contains roughly 200 cities whose price will be the highest due to their strategic position.

Their notoriety and attractiveness are high due to strategic advantages such as capitals, geo-strategic location, financial hubs, religious sites, touristic cities, etc.

This tier represents the most famous and prominent cities that are inclined to be bought quickly because of their strategic advantage and the landmark assets located within the city. These advantages and landmarks will greatly increase demand, making this tier an attractive and lucrative market for many investors.

Cities in Tier 1 are strategic assets for those seeking to become and remain president since they will hold the most value (in $).

Tier 2 Cities

Tier 2 represents the top 1% of regional cities in each country. These cities are not necessarily known at the international level, but they are very well known at the national level. While they may not be essential assets globally, they are still valuable and will be priced as such.

These strategic cities will typically feature items such as airports, ports, companies, population, nationwide attractiveness, monuments, among other important landmarks.

As a result of their reduced cost, it will be easier for users to purchase several Tier 2 cities to accrue wealth and become president.

Tier 3 Cities

This third segment will target the lesser-known cities in a country. Nevertheless, these non-touristy towns, with fewer people, will still allow the governor access to the country and allow them to create an economy and promote their city.

Even if their attractiveness is lower than cities in the other tiers, they will allow a person to buy a city at a low cost and become governor. By becoming a governor, the buyer will enter the closed circle of decision-makers and receive taxes (1% on the sale of assets in their city).

Buying these cities will prove an advantage in the long run since there are limited digital cities in Earth-Meta. They will be in high demand by governors due to their relatively lower price.

Moreover, collecting these cities can be a strategy if the goal is to acquire territory since many less populated cities have a large land territory. Those assets can be used to create city projects that require space and sell or rent parcels as digital real assets.

City Pricing

Because EarthMeta is a digital reincarnation of planet earth, the prices of cities will be determined entirely by reflecting the same attributes that determine prices in the real world, such as a city's economic and financial position. For example, Los Angeles has the 5th largest GDP in the entire world, and New York has the highest real estate value in the United States at $2.8 trillion (roughly the entire UK's GDP in 2019). These are important criteria taken into account in the valuation of assets and real estate. This factors are included in our pricing model because EarthMeta provides the opportunity to buy a city with its dozens/hundreds of architectural, geographical, and historical characteristics and assets (buildings, streets, monuments, entities...). Governors of each city can then sell all or part of their assets at the price of their choice while keeping ownership of their city. New York and Los Angeles are also examples of densely populated cities, which is another criterion taken into consideration, among other attributes while building our machine learning platform.

A Machine Learning Approach

Based on the attributes mentioned above, our team created a machine learning framework to evaluate city prices at scale. This will enable us to price effectively, remove market inefficiencies, and reduce the possibility of overpricing cities. This solution outperforms linear hedonic price regressions based on its predictive performance out-of-sample, even if we allow the hedonic regressions to "see into the future" by estimating them on the full dataset, including the validation sample. The machine learning platform identifies nonlinearities and high-order interactions between the characteristics of an asset (attractiveness, the sum of total asset prices within the city, the city's GDP, religious position, etc.), which drive improvements in its predictive ability relative to hedonic price regressions and help establish reasonable valuations, especially for outlier items.

For EarthMeta, we implement a specification that is used to study price-formation.

Our regression model is as follows:

$$Pjt = \alpha Wj + \sum \beta k Xkjt\ k + f(t) + \gamma Zjt + \epsilon jt \ldots\ldots\ldots\ldots \textbf{(Equation 1)}$$

where Pjt denotes the USD sale price of city j at time t, Wj is a set of continuous attributes of the city (mentioned above) with associated coefficients α, $Xkjt$ is an indicator for the presence of discrete attribute k in item j at time t with βk as the associated coefficient, $f(t)$ includes time-specific fixed effects, Zjt is a set of control variables with associated coefficient γ, and ϵjt is an error term. The coefficients α and βk capture the implicit prices of different attributes. First, we estimate this specification and, in the following step, relate the estimated coefficients βk to the scarcity of the associated attribute.
Instead of presenting the implicit prices βk for a large set of discrete value attributes, we relate the estimates of the implicit prices to the commonality of the associated attribute.

We estimate a regression of the form:

$$\beta k = \theta Sk + \xi C(k) + \nu k \ \ldots\ldots\ldots\ldots \textbf{(Equation 2)}$$

where βk is the estimated attribute-specific parameter from the price regression, Sk is the log commonality of attribute k, $\xi C(k)$ is a fixed effect for the category of attribute k, and νk is an error term. We estimate a separate second-stage regression rather than simply including the commonality term in Equation 1 to ensure we adequately control for the value attributes when obtaining estimates for price and generation in the first-stage regression. Here, we use only the residual variation attributable to the value attributes in the second-stage regression.

The machine-learning model uses as inputs item characteristics and measures for the state of the market and outputs a predicted transaction price of the item which we interpret as its valuation. This approach allows for more flexible interactions and the possibility of nonlinearities in the relationship between the input variables and the outcome. In contrast to the hedonic price regressions (equation 1), we cannot include fixed effects in our machine learning model as it must be capable of making predictions on future data. Instead, we incorporate the ETH/USD exchange rate as an additional predictor variable. This helps our proxy for the state of the market at any point in time.

We estimate a gradient-boosted trees model using the extreme gradient boosting implementation. This model combines the predictions of several decision trees' built-in sequences, such that each subsequent decision tree attempts to minimize errors for observations not well explained by a model consisting of all prior decision trees. The effectiveness of gradient-boosted trees models has been demonstrated across a variety of economic contexts, making them a natural candidate for our platform.

Land

"Every Person Has A Story, and Your World is Waiting for its Own."

Governors will be able to delineate houses, streets, buildings, monuments, parks, forests, clubs, and more in Phase 1. They can then sell them in Phase 2 and use or rent them in Phase 4.

We explained earlier that selling a perfect shape such as a square, rectangle, round, or hexagon is not feasible in the real world as more than one person will be able to buy the same land.

For example, with this approach we could have a world in which eight people share Central Park in New York that is divided into eight identical shapes. One person would have a piece near the City of New York Museum. Another would have a bit with the Blockhouse; a third near the Jewish Museum, etc.

This situation could be beneficial only if a person might only want to own the part of Central Park where the Blockhouse lies, for example.
But multiple problems emerge:

- Nobody will be able to sell or acquire the whole park, which leads to dissatisfaction among people buying or selling.
- The property will lose its sense of exclusivity and rarity, making your property relatively easier to acquire and decreasing in value.
- There will be a price competition which will create price gaps between the different sections of the park, as the part near the Jewish Museum could be much more expensive than the part near the Museum of the City of New York.
- It is impossible to create gamification around only one part of Central Park.

EarthMeta eliminates these problems and provides solutions by giving each Governor the **exclusive right** with Polygons to delineate their assets themselves. They will be able to outline and sell Central Park in its entirety and with its actual territory. This delimitation will be done only by Governors with the liberty to follow their own logic and purpose.

A matching system will be available to help them delineate their assets. Indeed, if they want to sell a monument in their city but don't know where to start, they will be able to rely on a list of assets composing their city and their objective values.

As long as an area of the city is not demarcated and sold, it will remain the property of the city governor.

Marketplace

"Buy, Sell and Trade Virtual Properties Limitless."

The Marketplace will be launched simultaneously with the development of cities to allow governors to sell the cities and assets that they have previously delineated. In addition, during Phase 2 users will be able to buy assets from other cities or buy cities that have already been sold at launch and put up for sale on our Marketplace.

Until a city has been sold, its assets cannot be sold. For example, if New York City does not have a governor, we cannot sell the Statue of Liberty on the Marketplace.

EarthMeta is a **decentralized** project, which means the blockchain manages all transactions, and no money will flow through EarthMeta. Every transaction that involves buying and selling of digital real estate will be done **without intermediaries** and, therefore, **without unexpected costs or transaction fees** of any considerable value. This makes the entire process decentralized and eliminates risks from involving third parties.

◊ Blockchain

EarthMeta is developed on top of the **Polygon blockchain**. Polygon builds and connects Ethereum-enabled blockchain networks. Most NFT projects choose Polygon because it is more open, robust, inherently more secure, and allows governors to take **full advantage of Ethereum's network effects.**

In addition, Polygon solves the most significant problem associated with blockchains: the high transaction fees and the slow pace of each transaction. This platform has addressed these issues by implementing an innovative, one-of-a-kind Layer-2 solution, enabling Polygon to use Ethereum for faster transaction verification at a fraction of the cost.

◊ A Decentralized Marketplace

We have spotted an unusual problem in marketplaces. When you buy or make an offer on virtual land, the marketplace takes the money immediately. But when paying you after you sell the land, it can take up to two months because the money is in transit through the platform for "verification." This leads to dissatisfaction among users and reduces flexibility.

The reason cryptocurrencies were created in the first place was to establish trust, and at no time does your money have to fall into your wallet.

So why would a platform hold your funds for so long? Why does the bank offer us interest rates if we let our money sleep with them? It's so they can use those funds for their own purposes.

EarthMeta does not act as a trusted third party and does not hold your money hostage. When you sell your asset on our platform, you go through the blockchain, so you receive the money **instantly**. The money will not transit through us at any time. No verification will be done by us. We want to ensure that you alone are the master of your funds and your cities. We simply act as a marketplace and, therefore, as a **facilitator** between demand and supply. We create the ecosystem to increase the demand, which is in the interest of sellers. You will therefore reap the benefits from the platform without the downsides of centralization.

◊ Information Displayed

Have you noticed that platforms with projects similar to ours don't hesitate to post the initial purchase price of the land on their page? While this may not seem to impress land buyers and may seem harmless, the purpose of this tactic is to disadvantage anyone who initially purchased land.

Here, if a person who wants to buy a piece of land sees the base price, they will feel ripped off buying it from a second-hand buyer due to the price increase from the previous sale. The same person ultimately prefers to buy a new unsold piece of land, even if its value and location are less advantageous. This drives up demand and consequently the price, inevitably creating more profit for the founders of the platform. This consequently results in **80-90%** of land sales being new and not used. The marketplace is, therefore, an ineffective market that focuses only on benefiting the platform's creators.

At EarthMeta, to solve this problem, we have implemented two solutions:

- Governors never compete with the platform, as we will never sell land. Only governors can trade land. Governors are thus in competition with each other, and each city has a differentiating factor that makes each property unique.
- We **will not** disclose the initial purchase price on the city page as our intentions are never to sabotage or even condemn owners for selling their cities at the price of their choice (even if the city is ten times more expensive than the price they bought it). Indeed, the price of the cities will increase over time as the project moves toward Phase 2. We, therefore, believe that the owner's price will be the right one and, unlike others, **the platform has been designed to help them** sell their city if they so desire.

EarthMeta Augmented Reality App

"Create Your Reality."

Today, technology is driving radical changes in immersive experiences. Many models inspired by augmented reality (AR) are now available in art, entertainment, real estate, travel, fashion, and other sectors as people spend more and more time in virtual worlds, whether for leisure or work.

In Phase 2, we will create an **Augmented Reality application for EarthMeta**. Our platform will become a location-based virtual reality platform built on our current world. You will be able to use your smartphone's camera to discover the AR around you in the real world and enjoy a nice walk on our augmented reality map while seeing who owns the city or the property you are in on EarthMeta.

For the launch of our application, we will set up a game and design a limited edition of **geo-located NFTs** hidden around the world. This will serve first as a promotion and an example of gamification that our governors can use.

NFTs today represent a kind of new El Dorado for artists, firms, and brands. They no longer a domain only for tech wizards and gamers. Luxury brands like Gucci, Vuitton, and Balenciaga, for example, have partnered with NFT developers or launched their own NFT collections in the Metaverse.

More than just rumors, we know that brands are looking for an **authentic** and **sustainable** way to promote and highlight their products. Moreover, because it is still new and this market is exploding, big companies are interested in virtual worlds as it's always important to keep up with trends so that they can stay one ahead of competitors.

For artists, we will set up a hub for any of these companies and brands by allowing them to exhibit and sell their artwork/NFTs. In addition, our governors will be able to **rent** key locations in their cities (if these locations are not already sold) for promotional purposes to companies or artists who want to distribute their NFTs.

The app's premise is simple: any user will be able to **create**, **experience**, and **monetize** content and applications in each city.

However, the city owner will have **complete control** over the content published in their land. Geographic coordinates will identify the content from the geodetic system.

AI Integration in EarthMeta

In EarthMeta, we've combined two powerful concepts: the Metaverse and Artificial Intelligence (AI). We recognized the rapid growth and potential of the Metaverse, along with the challenges it poses, so we've taken steps to create **a Metaverse that is fully driven by AI.**

Our AI utilizes complex algorithms to analyze extensive data from the Metaverse and uncover important trends and patterns. It identifies significant digital assets within virtual cities using sources like satellite imagery, public records, and user-generated content. This provides users with a comprehensive understanding of each city's unique characteristics.

The EarthMeta platform uses AI algorithms to assess various factors including economic strength, cultural and historical significance, population size, and more, to determine the cumulative grade of each governor's cities within a country. This AI-driven approach removes any potential for bias or manipulation, ensuring the **ranking process is fair and impartial.**

By incorporating AI into the President selection process, EarthMeta further ensures **transparency** and **objectivity** in the Metaverse. This approach empowers governors and fosters a competitive yet equitable environment, where the most deserving individuals are recognized as Presidents based on **objective criteria.**

But it doesn't stop there. Our AI goes beyond asset identification. It creates detailed descriptions of digital cities, delving into their historical significance, demographics, and economic indicators. This wealth of information enables users to **make more informed decisions.** It will also assist users in naming and describing their assets, land, and countries, offering accurate suggestions **based on property data.**

By integrating AI into EarthMeta, we aim to enhance the user experience. Users can access reliable data, giving them the confidence to participate in buying, selling, and trading digital assets within our platform.

Every piece of information will be available to them, from 3D objects and animations to event creation. No door is closed with EarthMeta, and we encourage each of our governors to create and develop their cities. To empower them, we will offer help with developing our **APIs** (See APIs interface), our technologies, and our innovations.

Staking Pools

"Build Your Own Economy."

Putting funds into a shared pool in which thousands of other players participate with a return of 0.x% Annual Percentage Yield does not mean much. We've given this considerable thought and will not create a pool for everyone.
In EarthMeta, there will be **one pool per city**. This concept will involve paying each person participating in the economy of a city their fair share. A contribution will be more meaningful in a pool where few people join to get all or nearly all of the 0.4% tax transaction. This will represent a one to two digit percent Annual Percentage Yield.

Thus, Governors will create their **own economy** around their city (or cities). Each city will then be considered a **separate entity.**

Asset owners will be able to place their assets in a pool in their city and receive a 0.4% share of each transaction that occurs in the city where their asset is located. This share will be divided between stakers in the pool in proportion to the value that their asset brings in the pool.

This will create long-term ownership and scarcity of assets available in the marketplace. It will also help the governors value their city whether in terms of taxes collected or in terms of price increase of assets in their city.

Our ultimate goal will always be to create buying pressure, instead of selling pressure, by allowing each city and, therefore, each governor to take advantage of the scarcity of their assets.

The Asset Matching System

With the development of all the assets in every city on our virtual Earth, EarthMeta will make a matching system available to all its governors.

We have created a program integrated into the platform to allow each city owner to identify the **points of interest** in the cities they own.

Our goal here is to make it easier and more **automated** to sell the assets in each city—no need to do research. We have a database and algorithms to differentiate each asset and identify the most valuable asset in your cities by evaluating their public, historical, and political interests, among other factors.

For example, if you own the city of Washington, the matching system will tell you that the White House and the Lincoln Memorial will be much more valuable than the Adams Memorial. This will give you the ability to know which asset in your city is the most valuable and determine the price of the assets in a logical sequence.

EarthMeta Tokens

It is said that "what lasts is not what resists time but what adapts itself to time by adopting the changes," and with the pace at which blockchain technology is evolving, there's no doubt that cryptocurrencies are becoming more and more mainstream. This is why we want to develop a single decentralized currency system within EarthMeta to develop our community project.

In addition to having the most **advantageous** staking and burning system for holders, our currency will offer a way to reach and intrigue an audience who are familiar with cryptocurrencies and enjoy the lack of risk and anonymity that comes with it.

At the moment, cryptocurrency is much more widespread and popular than the NFTs and digital real estate comprising the Metaverse. The launch of a cryptocurrency linked to our project will provide us access to new demographic groups of tech-savvy users who are used to cryptocurrency markets, as well as allow us to dip into broader markets and appeal to users around the world.

The ultimate goal will be to introduce people to the virtual world by offering them the benefits of joining that world.

In addition, our currency will bring **liquidity** into the virtual world of EarthMeta. Once again, the governors will benefit from this because the more money that flows in, the greater the value of cities for each governor, and the bigger the ecosystem will become.

For more information about EarthMeta Token, dive into the EarthMeta Token whitepaper.

DAO Governance Mechanisms

EarthMeta is a community-driven project that relies on its community (Decentralized Autonomous Organization - DAO) and uses voting for important decisions. We want to serve as an example of redefining how to commit to a project. As we work towards our common goals, we will strive to be 100% transparent with our governors and users.

Therefore, decisions and choices will be put forward to all governors who wish to intervene through smart contracts, and EarthMeta won't make any decisions if the choices are at odds with the previously established rules. All governors will be **decision-makers**, and **online voting** will enact these decisions. This ensures **autonomy throughout** the project as its operation is nearly automatic.

Only governors who own a city will be able to participate in the DAO. This ownership will give you access and the authority to take part in decisions and propose ideas.

API Interface

EarthMeta will be a platform that facilitates the creation of other projects.

As mentioned before, each governor will be able to program games in the form of quests for the users. For instance, they could organize a race or other AR game to provide a new way to see and discover the world. Governors can also monetize their city while developing and using their currency within their city. EarthMeta will not influence or intervene in their choices since we are committed to our governors' creativity, development, and growth.

Everyone is looking for a unique but effortless experience using an application or a service. EarthMeta spared no effort as technological advancements have become more **straightforward** and **accessible**. To serve the governors, we will implement specific tools such as **APIs** to help them automate each of their processes.

This will allow governors to accelerate the development of their applications. They will be able to **build, optimize and deploy** their products faster using robust and open APIs. This is more **efficient** than creating an application in-house by writing code from scratch.

Additionally, thanks to the APIs, they will be able to quickly access **real-time** data, connect to their accounts, view their available balances, perform transactions (purchases and sales), view transaction history, and more. We will offer a **personalized** experience that is, **fast**, **responsive, secure,** and above all, **transparent**.

Transaction Fees

On most Metaverse platforms, costs of up 6 or 7% of land sales / purchases typically accrue to the creators. These same creators preach fairness and justice, but keep these costs **hidden** until a transaction is complete and users notice that 7% of the price is **missing**.

These 4-7% fees on all sales are typically explained as "marketing costs" while the community grows independently. They can also be explained as a development and coding fee for the places with the most superficial development. The creators also often state that they use these fees to keep the team active on the project. But if this same team needs so much to stay on the project, they don't believe in it.

The explanations behind these costs never seem legitimate. And if fees are perceived as unexplained or hidden, that erodes trust in the platform. At EarthMeta, we want to be fully **transparent** about taxation with our governors.

◊ EarthMeta Team Fees

EarthMeta's team fees will be **1.4% of each sale made on the Marketplace** to ensure the sustainability and continuity of our project. Our goal is to **innovate** and **offer the best** to EarthMeta holders.
We divide the 1.4% fee as follows :

» Development

We will use **0.5%** of the fee to cover the research and development costs to bring a **unique AR/VR experience** to each of our governors in the near future.

The development costs include :

- The development of the API;
- The development of the cities;
- The development of the marketplace;
- The development of tools available to the governors to manage and evaluate their cities;
- The development of gamification;
- The development of the EarthMeta VR game's beta version;
- The development of the bridge between EarthMeta AR & VR applications;
- New UI/UX developments;
- The development of a white-label platform for governors;
- Additional updates and development of the platform to improve the user experience.

» Marketing

Having already invested ourselves at the beginning of the project to cover marketing costs, we feel that continuity is needed to ensure the sustainability of the project. As more people join, the project will grow and become global.

The marketing costs include:

- Advertising, documentary, and explanatory videos;
- Development of social networks;
- Paid advertising on several social networks, websites, or google search;
- SEO development;
- Editorial;
- Any other advertising or public appearance.

» Expansion and Growth

To ensure the sustainability of a large and technologically advanced project such as EarthMeta, we need a team that is **100% present** and **dedicated** to the project. We look for people who are committed to the project for the **long term** and who know it well from the beginning. We have hired more than 10 employees today, but the team is constantly growing.

» The Staking Pool

As explained previously, 0.4% of each transaction will be distributed to players in each pool. In Phase 2, 0.4% of the team fees on the sales/purchases of the assets of each city will be automatically paid to them. (See Staking pools)

◊ Taxation on the Platform

"EarthMeta Is A Community-Driven Project."

Taxation breakdown:

» City Transactions: 2%

0.5%: President (See Receive 0.5% in taxes)
1.4%: EarthMeta team
0.1%: Charitable donations

» Land Transactions: 3%

1%: Governor (See Receive the 1% governor taxes)
0.5%: President (See Receive 0.5% in taxes)
1%: EarthMeta team
0.4%: Staking Pool (See Staking pools)
0.1%: Charitable donations (See Charity)

CHARITY

0.1% of every transaction made in the EarthMeta Marketplace will be automatically credited to a wallet used to support our Charity program.

EarthMeta's close-knit team fights against poverty and specifically against inequality of opportunities.

Our team has made it their mission to do their best to give a chance to as many people as possible whose safety, health, and lives are threatened or who are not as fortunate as we are.

We believe that every child in an underdeveloped or war-torn country deserves a better chance and access to quality education. This is what makes us human beings above all.

EarthMeta's charity program specifically targets children who live in poor countries and conflict zones who suffer from interruptions to education that damage their future economic opportunities. These children find it more difficult to participate in society as adults. Accordingly, a lack of education appears not only to be destabilizing but also to have a negative effect on peacebuilding and development.
Providing access to education not only provides a pathway out of poverty for children but grows economies and improves the health and longevity of communities.
Our goal, through this program, is to bring concrete help and a solution that we think is sustainable, because the children of today are the future of tomorrow.

We want total transparency with this project, including where these funds will be placed. That is why we do not want to go through a major third party. We want to do it directly from one person to another like in the cryptocurrency world or in short-circuit with local associations. This ensures that all donations reach those who really need them.
As proof of our charitable program and to guarantee more transparency to each person in our community, we commit ourselves to publishing each action made with the money collected and redistributed on our social networks as photos, videos, and reports. It is for this very reason that we invite you to follow our social network accounts to see what you have participated in accomplishing with this project.

OUR TEAM

The EarthMeta team is composed of young and experienced professionals who have been involved in the project since the beginning and work to implement the project's vision. All team members come from different nationalities and reflect EarthMeta's vision to reach a global market.

TAHA BOUARFA

Founder & CEO

KAWTHER GHAZAL

Co-Founder & CMO

KAOUTAR

Growth Marketing Manager

CLAIRE

Operations Lead

IDIR

CTO Blockchain

NADHIR

Web 3.0 Developer

GAOUAR

AR Developer

BRAHIM

Full-stack Developer

OUR TEAM

MEGHNINE

Lead Back-end Developer

BADREDDINE

Back-End Developer

AD

API Developer

VOLODYMIR

UX/UI Designer

MOLOY

Front-End Developer

OUSSAMA

Graphic Designer

KHALED

Mobile Designer

SHEMSOU

Social Media Manager

Roadmap

EarthMeta is being shaped by its community.
Guided by the ideas, feedbacks, and expectations of EarthMetians, we are entering a phase focused on strengthening what truly matters: stability, refinement, and trust. Our priority is to build a Metaverse that feels solid, secure, and intuitive, a place users can rely on.

From Foundation to Expansion.
2026 marks a turning point where vision meets execution, where development and marketing move in full alignment, and where EarthMeta transitions from growth to impact. This roadmap is a commitment to building a Metaverse with purpose, clarity, and long-term utility, alongside the community that brings it to life.

June 2024

- Whitepaper Release
- $EMT Token Presale
- Scale Up Team Members

October 2024
Phase 1

- EarthMeta Platform Launch
- Initial NFT Cities Presale and Claim
- Announcement of Countries' Presidents
- Referral and Incentive Campaign

December 2024
Phase 2

- EarthMeta Token Listing
- City Marketplace Launch
- Launch of Land Delimitation for Governors
- Integration with OpenSea Marketplace
- Localization to more Languages Targeted
- Influencer Marketing

Q1 2025
Phase 3

- CEX Exchange Listings for $EMT
- Land Marketplace Launch
- Scale-Up of the Asset Matching System
- Integration of Governance Systems

Q2 2025
Phase 4

- Cross-Chain Compatibility for $EMT
- Analytics Dashboard for Governors
- Large-Scale Marketing Campaign
- Governor-Driven DAO Model
- Finalization of City Data Collection Systems

Q3 2025
Phase 5

- Governor Development Tools
- Introduction to $EMT Burn Mechanisms
- Launch of the Affiliate Program
- Integration of dApp Partners

Q4 2025
Phase 6

- Construction Editor for Buildings and Infrastructure
- Launch of EarthMeta AI 3D Builder
- Gamification Features for Landowners
- Public API Documentation for Governors

February 2026
Platform Hardening & Trust Layer

- Marketplace logic hardening (edge cases, auctions, transfers)
- Zero-rollback policy to eliminate recurring regressions
- **Stress-testing of high-volume marketplace scenarios**
- White Label Portal for City Projects
- Introduction to EarthMeta's monthly best creators contest

March 2026
Marketplace Maturity & City Utility

- Advanced marketplace tooling for city owners
- Governor-focused analytics for decision-making
- Stable object placement and interaction logic
- **API Business Partner Integration**
- Launch of the official EarthMeta blog page
- Introduction of "City of the Month" with dedicated interviews

April 2026
Platform Architecture Upgrade

- **Introduction of Avatars**
- Support for external 3D model imports
- Controlled construction engine for predictable results
- **Release of the new EarthMeta website UI/UX**
- Media exposure through reputable outlets
- Real use-case storytelling

June 2026
Economic Engine

- **Staking pools for governors and landowners**
- Universal templates provided by EarthMeta
- Digital assets marketplace expansion
- Targeted YouTubers campaign
- Clearly defined user and visitor journeys
- Growth to 30,000 members across X and
- Telegram communities

September 2026
AR as the Breakthrough

- **EarthMeta AR mobile app launch**
- City and landmark visualization in AR
- Charity fund allocation
- $EMT Aggressive burn model
- Strategic social media campaigns
- Official EarthMeta presence at metaverse and crypto industry events

October 2026
Mobile App & Widgets

- **EarthMeta wallet mobile app launch**
- AR app feature expansion:
  - Cities and landmarks overview
  - User profile
  - Marketplace snapshot
  - Home-screen widgets
- Geolocalized NFT art launch
- Plug & Play Widgets for Governors
- Airdrop campaign

December 2026
Ecosystem Expansion & Partnerships

- **Launchpad for city projects**
- Digital real estate agents portal launch
- dApps and DeFi interoperability
- Partnerships with reputable blockchain projects
- Partnerships with real companies and brands

VR Future

Continue using community feedback and push the limits further!