Auction House Whitepaper

Abstract

We present Auction House, an open-source NFT marketplace on Ergo blockchain. This whitepaper explains the future of Auction House and its roadmap. Auction House is the first NFT marketplace on Ergo blockchain with novel solutions for efficient smart contracts and royalty structure. Here we present our primary goals, roadmap, tokenomics and vision.

Ergo Platform

Ergo is a *Proof-of-Work (PoW)* protocol built as a ground for decentralized applications. It is flexible, efficient and secure. Ergo has achieved these properties by including various technical and economic improvements to existing blockchain solutions. Ergo also introduces a new blockchain-specific programming language, ErgoScript, to provide an underlying framework to write *smart-contracts*, which enables developers to deploy their decentralized applications on the blockchain (Ergo Developers 2019).

Decentralized & secure

Ergo is a "Decentralized First" platform, meaning that applications and the platform itself is built to prevent malicious activities of central parties (Ergo Developers, 2019). The community always insists on deploying applications with no or little centralized parts.

Also, centralization of mining is prevented during its lifetime, as regular people can easily participate and mine by running a full node (Ergo Developers, 2019). It's worth mentioning that the number of miners has increased dramatically in Q4 2022, as Ethereum is moving towards a proof-of-stake mechanism, resulting in a more secure, more stable, and more reliable network for Ergo.

Huge public allocation

When Ergo launched in 2019, there was no initial coin offering, no pre-mine and no pre-allocation of tokens to any team members or venture capitalists. A truly fair launch with 4.43% of funds allocated to ecosystem development and the other 95.57% circulating among people. Unparalleled in any other smart-contract platform (*Ecosystem*, n.d.).

Smart contracts

Ergo provides a framework to run distributed softwares in the form of *smart contracts*. Such applications utilize this functionality of the underlying platform to write smart contracts and implement their logic by means of a blockchain-specific programming language (Ergo Developers, 2019).

Long-term and consistent development

Ergo has implemented various mechanisms to maintain a long-living blockchain, such as light nodes with minimal storage requirements, storage-rent fee to prevent bloating of full-nodes, and self-amendable protocols to adapt the changing environment with no trusted party (Ergo Developers, 2019).

NFT and Artworks

Auction House is a marketplace for *Artworks*. Artworks are presented in the form of *Tokens*. Tokens are supported natively by the Ergo protocol, in EIP4 (catena2w et al., 2019).

An NFT is a "non-fungible" token, meaning that it's unique and can't be replaced with something else. For example, a bitcoin is fungible - trade one for another bitcoin, and you'll have exactly the same thing. A one-of-a-kind trading card, however, is non-fungible. If you traded it for a different card, you'd have something completely different.

NFTs are tokens that we can use to represent ownership of unique items. They let us tokenize things like art, collectibles, even real estate. They can only have one official owner at a time and they're secured by the blockchain – no one can modify the record of ownership or copy/paste a new NFT into existence.

Artworks can be fungible or non-fungible, depending on the purpose of their artists. By all means, artists can *list* any of their artworks, meaning that those artworks will be set to be sold. Either *Fixed-price* or *Auction* or some other type of auction such as dutch auction.

Our Vision

- **Decentralized**: No centralized body controls Auction House as it is a fully-decentralized artwork market. Auctions, artworks, collections, and other entities in the design of Auction House live on the Ergo blockchain. So, anyone can validate the transactions and make sure everything is secure.
- **You are the owner of your artwork**: One can easily list their artworks without worrying that it will be lost or stolen. Listing an artwork does not transfer its ownership to anyone else. Unless the very moment you sell an artwork, you own it.
- **Long-term development**: We always prefer long-term plans over shorter ones, as our focus is to deliver and maintain a long-living marketplace. We never sacrifice our users' rights and plans for short-term profits.
- **Art & Artists**: We highly praise art as a deep and distinct human activity. We believe that artists' works and imagination are precious and should be presented at their best. We are art lovers and do our best to reflect this feeling to our users.

The First NFT Market on Ergo

Auction House is the first NFT marketplace on Ergo, up and running since October 2020. It has been tested and used for around two years. Multiple bug fixes have been done and two versions (V1 & V2) have been released. The website is currently stable and its smart-contracts are pretty reliable.

The most important aspect of the current running version of Auction House is that it is completely decentralized. Artworks and auctions are all implemented inside the users' browser according to the EIP-22 and EIP-24 standards. We continue our way to stay fully decentralized, as it is one of our core values at Auction House (anon_real, 2021).

Auction House V3

The next version of Auction House will be the biggest release of it so far. Huge improvement in UI & UX, alongside introducing new features including collections and launchpad will be there. Specifically, these features will be released in the next release and continuously afterwards with consistent development:

Re-designed UI

Our website has been completely redesigned by our design team to include new features and improve the overall user experience.

Verification

To prevent scam and fraud, we will have a clear procedure for collections to get verified on our website. If the community finds it necessary to have artist verification as well, we will implement that as well with a similar procedure.

Collections

At the heart of many NFT markets, collections play a vital role. They are one of the most effective ways to show artists' works. Our website will be the first NFT marketplace on Ergo Blockchain to implement the newly proposed EIP-34 for collections (anon_real, 2022).

Launchpad

Listings can be started at a certain date and time in the future. Artists can reserve a spot on our website to announce upcoming releases of their collections and promote their work.

Improved Security

Every process in the Auction House is transparent. Smart contracts are open-source and have always been reviewed and verified by the Ergo community. The next version of Auction House includes a few new smart contracts such as new auction types, which will be reviewed by the community. Moreover, the newly proposed collection and artwork V2 EIPs have been reviewed by the community

New Listing Types

Auction House will have these three listing types:

- Fixed Price Listing
- Highest bid Auction
- Dutch Auction

Bulk Minting

To help artists to create collections easily, we have implemented bulk minting already and will be a part of our next release. We will work closely with artists to improve bulk minting.

Trait Standard and Filtering

As a part of the new artwork V2 standard (EIP-24), Auction House supports traits. Users can filter collection artworks based on these traits (anon_real, 2021).

Buy offers

Auction House will support buyers making offers for some artwork even if the artwork is not listed for sale. The owner then can accept or reject the offer.

Market

NFT market cap is over two billion dollars with millions of dollars of daily trading volume. Our team has extensively studied top-tier market places such as Opensea, Foundation and x2y2 to

be able to have a clear and bright roadmap for Auction House. We believe with the advantages of Ergo blockchain, our innovative team and recent increasing interest in Ergo from other communities such as Ethereum, with the right marketing, we can attract many new artists to Auction House.

Roadmap

Q4 2020 - Q3 2022

- Introduced timed auction contract [EIP-22](#)
- Introduced a novel approach for having [royalties](#) on Ergo blockchain
- Introduced artwork standard for Ergo blockchain
- Re-designed the initial limited website to include audio and video NFTs
- Proposed collection EIP on Ergo blockchain -- [EIP-34](#)

Q4 2022 - Q1 2023

- Re-design the front-end to a more modern and responsive one
- Implement and test "Collections" based on [EIP-34](#)
- Improve royalty mechanism to allow multiple recipients
- Deploy owned backend
    - Enables us to be independent of the Ergo explorer
    - Enables us to be much faster than before
    - Provides infrastructure for features such as bulk minting
- Generate Auction House Token (AHT) and start distribution
    - Partnership with [ErgoPad](#)
    - Distribute the token in ICO & IDO Rounds
    - Provide staking solutions on [ErgoPad](#)
    - Implement utilities for the token:
        - Feature/promoted artworks
        - Investigate profit sharing solutions with the help of [ErgoPad](#) and [Spectrum](#)
        - Reward the sellers and buyers with the AHT token proportionate to the auction price

- ■ Introduce "launchpad" -- will allow artists to promote their artworks before the auction starts by paying AHT token
- Deploy the website on test-net
- Re-design the logo
- Implement de-listable and editable fixed-price auctions
- Introduce Artworks v2 ([EIP-24](#)) and Refactor smart contracts for better design and performance
- Expand the development team
- Form a marketing team and organize marketing activities

Q2 2023 - Q4 2023

- Improve the support and a help center for the website
- Design and implement offer contracts
- Improve UX and UI
  - ○ Better filtering
  - ○ Improve UX based on the feedback
- Setup monitoring for the back-end for 100% uptime
- Design test suites for the backend
- Implement new utilities for AHT:
  - ○ Different artwork cards for promotion
- Document the API for mass adoption
- Connect the development and marketing funds to [ErgoTeam](#)

2024 & Beyond

- Develop mobile app
- Design and build a recommender system

Disclaimer

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Tokenomics

We introduce Auction House Token (AHT) alongside multiple utilities and purposes for it. It will serve as a utility token for Auction House. We will have exclusive features for artists and NFT buyers who pay for the feature in AHT. These features include:

Promotion

Users can promote their artworks in the landing page, their listings and auctions in the launchpad.

Reward

Buyers and sellers will also be rewarded in AHT from this part of tokenomics. For example, buyer and seller could get back 5% of the auction price in AHT, e.g., 5 AHT if the auction price is 100 ERGs.

Profit Sharing

AHT can be staked through ErgoPad to earn a portion of Auction House's profit. Auction House will make profit when artworks are sold. We currently take 2% of the final price as our fee.

We will devote 30% of Auction House profit to our stakers. The distribution period and details are yet to be decided on. Initially we will distribute this 30% in an automatic but centralized fashion since there is not a working solution as of today on Ergo blockchain. Later on, as ErgoPad releases Paideia, we will use it to make this process decentralized.

Token shares (500,000,000 AHT in total)

Liquidity (locked) (2% | 10,000,000 AHT)

We will add liquidity on Spectrum with the Erg/AHT pair.

DAO (22% | 110,000,000 AHT)

The community around AHT will have full control over this part. They can fund proposals, burn tokens or put them in a yield farm to earn profit. As of today, there is no clear solution on Ergo to handle these scenarios. Our team will do its best to provide a solution to achieve the outlined goals for DAO through platforms such as ErgoTeam, Spectrum and ErgoPad as soon as there are such solutions.

Utility (25% | 125,000,000 AHT)

This part of tokenomics will be used to achieve the utility goals of Auction House. These tokens will never be staked or sold, they will only be used for utility purposes.
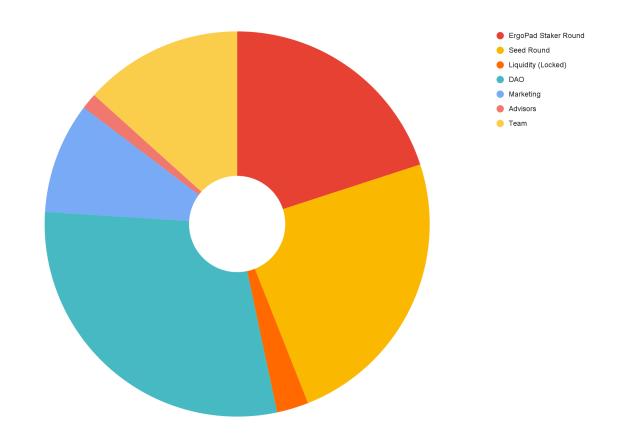
Team & Advisors (11% | 55,000,000 AHT)

Our team will always prioritize Auction House and the community's advantage over personal interests. We have especially chosen long vesting and cliff parameters to reflect this.

Marketing (7% | 35,000,000 AHT)

With the release of Auction House, we will form a marketing team to attract new artists and buyers to our platform. The NFT market is huge and we believe with the advantages of Ergo blockchain and our innovative team, we can play an important role in this market.

Distribution	# Tokens	% of	Price Per	TGE	Emission	Cliff

		Total Supply	Token	Issuance (%)	Frequency & Length	(months)
ErgoPad Staker Round	75,000,000	15%	$0.0015	0%	Daily over 10 months	1
Seed Round	90,000,000	18%	$0.003	0%	Daily over 5 months	1
Liquidity	10,000,000	2%	$0.006	100%	-	0
DAO	110,000,000	22%	-		-	4
Utility	125,000,000	25%	-	0%	-	0
Marketing	35,000,000	7%	-	10%	Monthly over 12 months	-
Team	50,000,000	10%	-	0%	Monthly over 24 months	3
Advisors	5,000,000	1%	-	0%	Monthly over 24 months	3
Total	500,000,000	100%	-	-		

Legend:
- ErgoPad Staker Round
- Seed Round
- Liquidity (Locked)
- DAO
- Marketing
- Advisors
- Team

Emission after 2 years (approximate)

Legend:
- Advisors
- Team
- Marketing
- DAO
- Liquidity (Locked)
- Strategic Round
- Seed Round
- ErgoPad Staker Round
- ErgoPad Staker Round

Month

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