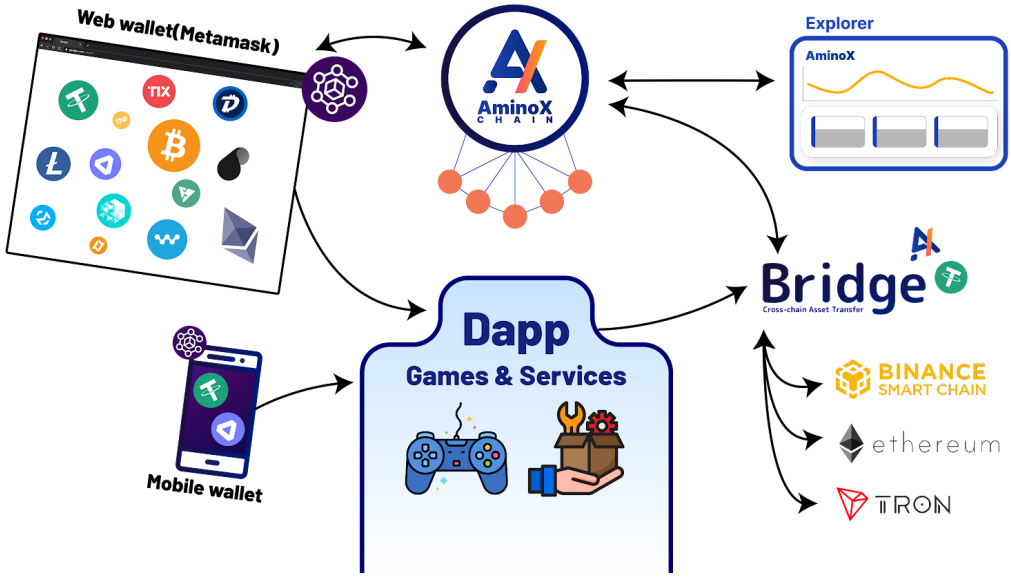
The Alpha carbon

Play. Develop. Operate. Govern. Earn.

Welcome to the Multichain Future

The Alpha Carbon team is building a platform where developers can build, own, and monetize their games and software. On the consumer side, users are able to enjoy goods and services provided by the developers. This harmonious interaction between developers and users is made possible by using ACT, the main utility token of the platform.

ACT holders will also be able to participate in governance of the platform via a Decentralized Autonomous Organization (DAO), where they can exercise voting rights on key decisions of the Alpha Carbon ecosystem. As a user, you will gain access to an enormous library of games and services, and best of all is the security provided by blockchain. Alpha Carbon has secured over hundred of thousands partnerships to build an entertaining, safe **"decentralized"** gaming platform owned and governed by players and operators. Alpha Carbon aims to bring blockchain into mainstream gaming, attracting both crypto and non-crypto game enthusiasts by offering the advantages of **transparency**, **fairness**, and **security**.



WHITEPAPER

DISCLAIMER

The information in this White Paper is subject to change or update and should not be interpreted as a commitment, guarantee or promise by The Alpha Carbon or any other individual or organization mentioned in this white paper relating to future availability of services related to the use of the tokens or to their future performance or value.

Abbreviations & Phrases

Amino X	A custom made blockchain with block speed of 3 seconds per block
ACT	ACT is an ERC-20 Utility token built on Ethereum blockchain that serves as the basis for transactions within the Alpha Carbon
RNG	Random number generator

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The Whitepaper

1. Executive Summary

Alpha Carbon is a platform where developers can build, own, and monetize their games and services on the Amino chain using ACT, the platform's utility token.

Our vision is to offer a premier blockchain experience and ecosystem that is deeply immersive in which developers can create games that players can enjoy and without central authority. We are aiming to disrupt the existing game makers by providing **transparency**, **security**, and giving users in our community both developers and users to participate with our utility token – ACT.

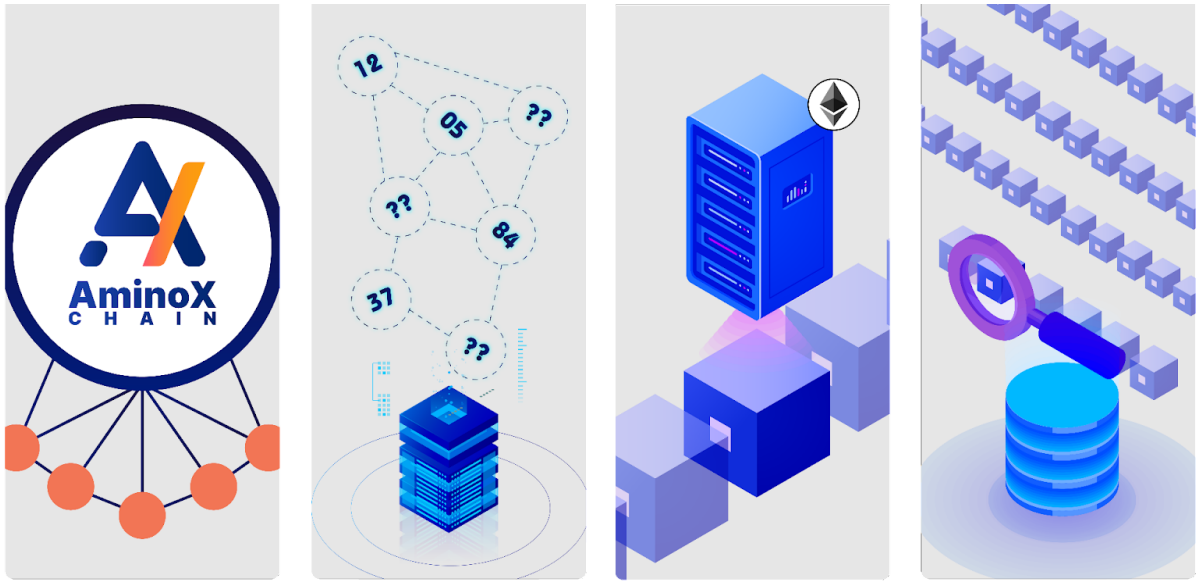
Our users can vary from many industries, but specifically the Global Online Gaming market is what Alpha Carbon will be focusing on.

One of the biggest challenges the gaming industry faces is fraud. Central control over the ecosystem invites skepticism such as unfair gameplay, manipulated game data, and trading scams. These are just some of the issues users routinely experience, and it is hard to establish trust between users and developers. Moreover, finding solutions to these fraudulent activities is difficult, as the transfer of data from one place to another on the internet without the interference of malicious actors has been mostly unpreventable. This is where **Alpha Carbon** comes in.

With **Alpha Carbon**, we aim to overcome these challenges while accelerating the blockchain adoption to grow the blockchain gaming market. We will do this by building our own proprietary Blockchain and **Bridge Service**, our infrastructure allows our developers to run specialized blockchains for any use case, with the support of cross-chain assets transfer, in addition, combined with smart contracts malleability and blockchains' security, the possibilities are only limited by one's imagination.

1.1 A Developer Friendly Infrastructure

The Alpha Carbon consists of four integrated products that together provide a both comprehensive and customizable experience for a developer.



SIDE CHAIN CAPABILITIES | RANDOM NUMBER GENRATOR | EVM COMPATIBLE SMART CONTRACT ENGINE | BLOCK EXPLOER

A. **Sidechain Capabilities**: Alpha Carbon leverages custom made AminoX sidechain to enable each game operator to run their services, or they can run on their own isolated Amino sidechain so that throughput and performance is not impacted by other factors. Both options are viable and provide better user experience and speed.

B. **Random Number Generator** : If everything is predictable in a game, that isn't much fun. That is why most games have the element of randomness, that said, implementing a random number generator on blockchain is not easy. Alpha Carbon has developed an on-chain random number generator that will serve as the backbone of all its games. Furthermore, this RNG is also independently verified and recorded on the block explorer, thus providing the best security.

C. **EVM Compatible Smart Contract Engine** : Being the largest and most mature base of blockchain technology, Ethereum virtual machine compatibility is essential for our vision. Thus Alpha Carbon blockchain fully supports Solidity through its EVM compatible smart contract engine. Software and game development on the Alpha Carbon will be able to

get support from veteran developers who are skilled in solidity and EVM-based projects, which will greatly increase productivity.

D. **Customizable Block Explorer** : Alpha Carbon offers game developers general blockchain and smart contracts data audit capabilities like other chains. Additionally, a customizable audit trail system framework is also provided. This audit trail framework allows historical game data and results from the RNG system to be easily traced by the end users. This framework allows game operators to establish instant trust and credibility with their potential customers.

1.2 A User Focused Ecosystem

Alpha Carbon is a happiness delivery vehicle, we provide the following three features for our users to have the best experience possible.

A. **Customized Mobile Wallet** : Users can interact with Alpha Carbon Dapps using our Carbon Wallet that can be embedded with the web browsers. As an EVM-based wallet, Carbon Wallet can be used to store tokens from other EVM compatible chains, which is convenient for players to manage their digital assets.

B. **Cross Chain integration** : Users can move their digital assets on and off the Alpha Carbon chains using the Alpha Carbon cross chain bridge. Naturally, there will be support for leading blockchains such as Ethereum, Binance Smart Chain, Bitcoin and Tron.

C. **Game Audit Trail and Chain Explorers** : A key feature is to provide users with the ability to access game audit trails as online environments often invite fraud and theft, but these risks are minimized on Alpha Carbon, especially that the random numbers used in games are provably fair thanks to the RNG.

1.3 What is ACT and what is it used for?

ACT(Alpha Carbon Token) is an essential part of the platform and the team is working on establishing key mechanics that makes it intrinsically tied to the Alpha Carbon platform and its value. ACT is an ERC-20 Utility token that serves as the basis for transactions within the Alpha Carbon, and has the following uses:

- **Access the Alpha Carbon platform:** Players spend ACT in order to play games, buy virtual goods, or pay for chain transactions and services

- **Governance** : ACT is a governance token that allows holders to participate in Governance decisions of the platform, using DAO structure. They can exercise voting rights on key elements such as reserve grant attributions to content and game developers and feature prioritization on the platform Roadmap. ACT owners can vote themselves or delegate voting rights to other users of their choice.

- **Node Staking** : When Alpha Carbon moves to a Nominated Proof of Stake(NPoS) consensus model, each node operator will need to stake a minimum amount of ACT and ACT holders can also stake in delegation pools to partake in validation rewards. When NPoS is implemented, total delegated stake sizes will determine the node selection. Initially, during the PoA phase, both validators and collators will be required to stake a specified amount of ACT as one of the qualification criteria for running a node.

- **Reserve** : The role of the Reserve is to support the ecosystem of Alpha Carbon, offering grants to incentivize high quality content & software production on the platform. The Alpha Carbon team will continue to build, iterate, and innovate, creating a virtuous circle to enable development for greater technology.

1.4 What do we plan next?

We have a strong product roadmap ahead and a top team to execute a strong vision to build a great e-gaming blockchain platform and ecosystem where users and developers can innovate, build, and enjoy goods and services while spreading the power of blockchain as the lead technology in the gaming industry.

In the short term, we are launching a new isolated side chain that is under rapid polishment, we called it the Amino X. This will be complemented with the Alpha Carbon Public launch. Amino X is introduced due to the current limitations of the Amino parachain, while secure, might not be fast enough for certain applications. Amino X not only has a fast block speed production of 3 seconds per block, it is also Ethereum/Amino compatible and bridged. As such, we expect Alpha Carbon to be available for many more developers, and this will increase liquidity and availability of ACT with the main purpose to collaborate with the community growth and ecosystem flow.

In relation to the proposed ACT offerings, the community developers and users will need to get access to ACT. We plan to make it accessible to the community through a few ways and primarily with Automated Market Maker mechanism, therefore, IDO(initial dex offering) will be launched.

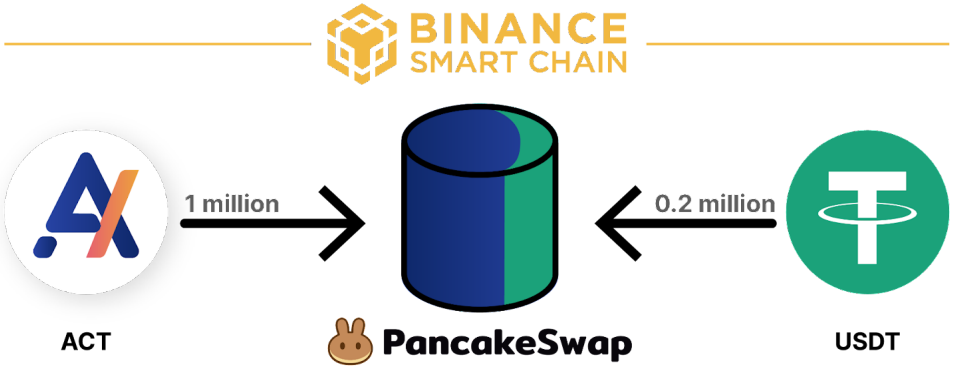


Figure: IDO/Pancake

An IDO uses a decentralized exchange(DEX) to facilitate the token sale, it is a type of crypto asset exchange that depends on liquidity pools where trades can swap tokens, including crypto coins and stable coins. For instance, ACT/USDT is a liquidity pair. IDOs provide immediate access to liquidity and trading, which is by far its best attribute.

As the community increases in terms of the number of developers, players, and assets exchanged in the market, there will be an increased need for ACT within the ecosystem. Therefore, while the total supply of ACT is fixed, the initial amount of ACT offered will provide a scarcity effect reducing the ACT per capita and therefore fostering demand. In the event of ACT becoming too scarce on the public liquidity pool, our team will carefully find ways to replenish the supply of ACT while minimizing the effect it might have on the market price.

1.5 Associated challenges and risks

It is the responsibility of any purchaser of ACT to inform themselves of, and to observe and comply with, all applicable laws and regulations of any relevant jurisdiction. Prospective purchasers of any ACT shall be expected to consider the risk factors identified in this section. If any indicated risks were to surface, then they could negatively impact the Issuer's finances and operational performance which can hinder the ability of the issuer to fulfill its obligations under this whitepaper.

The challenges and risks are identified by the board of administration of the issuer as at the date of registration of this whitepaper. This does not exclude the possibility of there being other risk threats and the purchaser must be aware that the impact on the issuer may be heightened due to a combination of several risks materializing simultaneously.

One of the main challenges in the project is the speed of blockchain, as many games and applications require fast if not instant response from the chain. Therefore, **faster block speed** and **better technical solutions** will be the key points for success. As such, we are focused on innovating and improving our platform constantly with new blockchain technologies and updates. We have therefore developed and implemented **AminoX** and are working on long term solutions like zkEVM scaling. The learning curve for new blockchain technologies is steep and moving fast, and the project success rate will be dependent on the Alpha Carbon developers, but worry not they got this.

2. Historical Background

In recent years, blockchain has become a new hot trend, and companies from different industries (finance, gaming, art, etc.) are all paying close attention to blockchain.

Blockchain technology is able to provide a mechanism of trust and transparency through an indisputable ledger of transactions. As mentioned above, most have recognized this potential and there is a growing list of public blockchains that offer some form of blockchain-based goods and services.

What's important to understand though, is that almost every tech company that uses blockchain has their own chain. Sure, it would be great to have the world use one single chain, but it appears to be more and more difficult if not impossible to establish world domination with a single chain run by one entity.

Another important point is, Blockchain development is not concentrated to, and or around, cryptocurrency. With the introduction of smart contracts, cross chain bridge, and other rising blockchain technologies, we are entering the next stage of blockchain evolution, the era where multiple chains can interact with one another, and **Alpha Carbon** is at the forefront of this phenomenon, the **Multichain Future**.

Alpha Carbon is built from the ground up using **substrate**, which was created by pioneers and veterans of the blockchain industry. Substrate is a **flexible**, **interoperable**, and **future-proof** blockchain framework. Our proprietary **Amino X sidechain** provides block speed of 3 seconds per block, we also allow users to create specialized blockchains for any use case and cross interact with different chains, in addition, combined with smart contracts malleability, the possibilities are only limited by one's imagination.

Our users can vary from many industries already mentioned above, but specifically the Global Online Gaming market is what we will be focusing on.

The problem with the existing blockchain platform is that they are not custom-designed for the gaming market so creating games on existing public chains is overly complicated. Specifically, general public blockchain technologies lack the critical set of features that a gaming specific blockchain would require namely:

- High throughput and scalability
- Game-specific isolation (ie having its own sidechain)
- Provably fair on-chain Random Number Generator
- Block Explorer that enables rapid confirmation of Provable Fairness
- Easy to use mobile wallet
- Cross chain bridge
- SDK for game builders
- EVM compatible smart contract engine

Another issue is that games are spread across many different blockchain platforms so the gaming experience for players is very complicated.

3. Alpha Carbon Platform

3.1 Mission

The Alpha Carbon team's mission is to build high tech systems where developers can create applications that are malleable, scalable, and secure. Without central control, users can enjoy goods and services from developers and improve quality of life.

The Alpha Carbon Team believes these innovations and continuous improvement on the technologies are important, for while the current developers and partnership can support up to thousands of games and services, it suffers from some key problems that could hinder future growth if not addressed:

- Slow block Speed
- Slow on boarding development speed
- Limited financial technology
- Steep learning Curve for users
- Lack of marketing
- Too many blockchain platforms

3.2 Blockchain Overview

At its core, Alpha Carbon is an ecosystem for players, developers, and the pillar of all is the AminoX chain.

3.2.1 AminoX Chain

Our **AminoX** chain is tailor made for its fast block speed production of 3 seconds per block.

Figure: AminoX Advantages

- 3 Second Block Speed
- EVM Compatible
- Multi Node & Bridged

3.3 Alpha Carbon Overview

Alpha Carbon is envisioned to be the 1-stop e-gaming blockchain platform and ecosystem that enables game developers and operators to efficiently develop games and for players to have access to a wide variety of games and be able to play them with peace-of-mind.

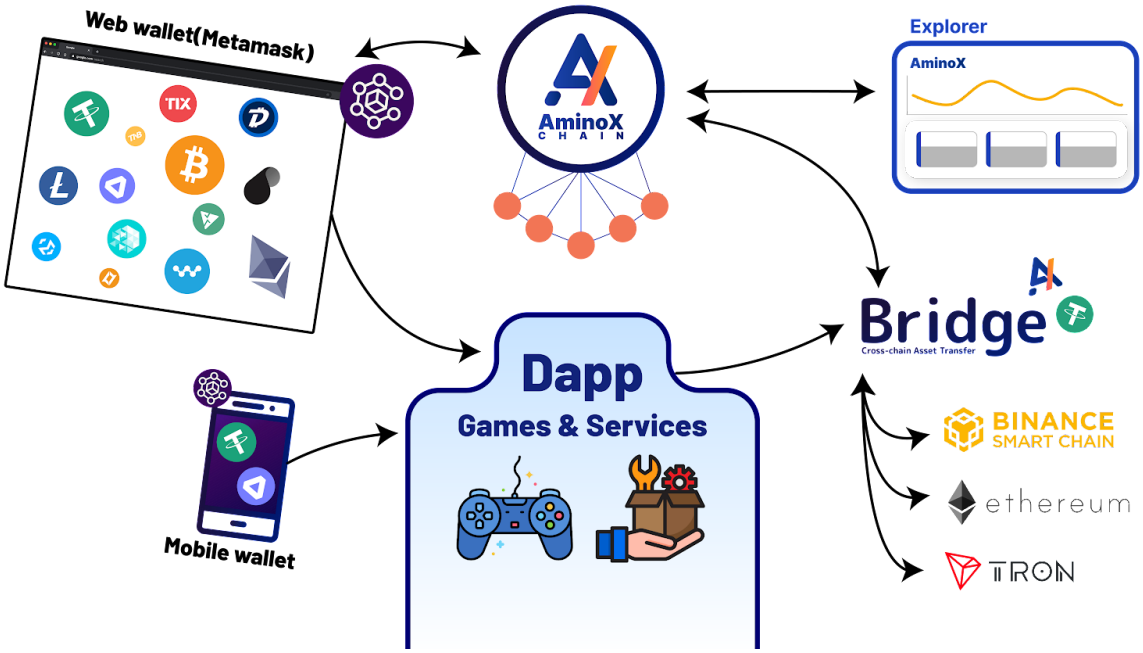


Figure : The Alpha Carbon Ecosystem

Game developers and operators can leverage purpose-built features such as an on-chain Random Number Generator and EVM-compatible smart contract engine to rapidly develop next generation blockchain-based games.

For players, Alpha Carbon provides an ecosystem that can be easily assessed and games on offer can be played with peace of mind. All Alpha Carbon games leverage the platform's provably fair on-chain Random Number Generator and all game results can be transparently traced and audited though its detailed block explorer.

Last but not least, the ecosystem has a native cross chain bridge along with its own native token tokenomics to ensure proper behavior among the various parties.

3.4 Game Developer Focused Features

3.4.1 Game & Service Specific Token capabilities

With our Bridge cross-chain token transfer capability, game operators can introduce their own game-specific tokens that would be native to their own chain.

3.4.2 On-chain Verified Random Number Generator (RNG)

All online games from dice to card games have an element that involves the usage of randomness. Random number generators, especially on blockchains are not as easy as one may assume. Alpha Carbon has invested in the development of an on-chain random number generator that will serve as the backbone to all Alpha Carbon games. This Random Number generator is also independently verified to provide Alpha Carbon players peace of mind when playing games.

3.4.3 EVM Compatible Smart Contract Engine

After reviewing the current blockchain landscape and state of development, it was decided that having an EVM compatible smart contract engine would be an essential piece of the Alpha Carbon offering. The reason is that at this time, the largest and most mature base of blockchain resources are skilled in solidity and the EVM-based ecosystem. Game projects will be able to tap into this pool of resources to develop their decentralized games and ensure that there is a pool of skilled developers, auditors and mature toolsets to support the game's development.

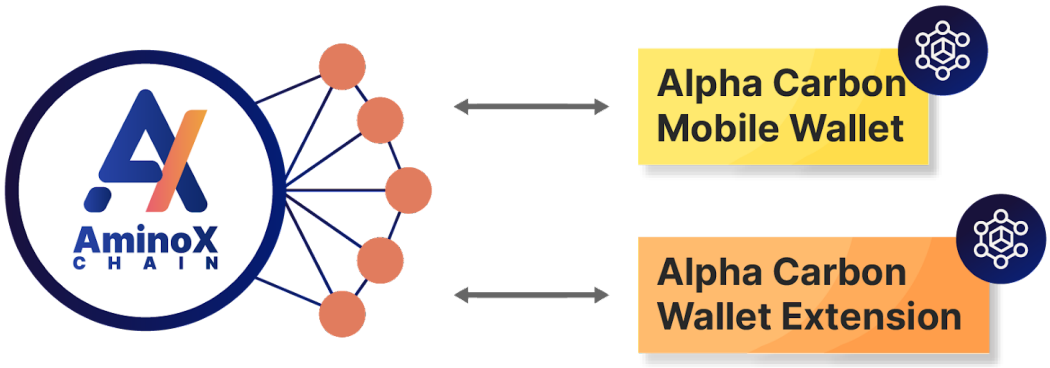
3.4.4 Customizable Block Explorer

Alpha Carbon offers game developers the ability to provide the general blockchain and smart contracts data audit capabilities like other chains. Additionally, a customizable audit trail system framework is also provided. This audit trail framework allows historical game data and results from the RNG system to be easily traced by end users. This framework allows game operators to establish instant trust and credibility with their potential customers.

3.5 Game Player Focused Features

3.5.1 Customized Mobile Wallet & Web Extension

Players can interact with Alpha Carbon Dapps using an easy-to-use Web extension or mobile wallet that can be embedded with web browsers. As an EVM-based wallet, the same wallet can be used to store tokens from other EVM compatible chains, making it convenient for players to manage their digital assets.



3.5.2 Cross Chain Integration

Players can move their digital assets on and off the Alpha Carbon chains using the Alpha Carbon cross chain bridge. There will be support for leading blockchains such as Ethereum, Binance Smart Chain, Bitcoin and Tron.

3.5.3 Game Audit Trail and Chain Explorers

A key feature of Alpha Carbon is the ability to provide players with the ability to access game audit trails and verify that random numbers used in games are provably random and fair. Built into the Chain Explorers is the ability to also look up game results and trace the generation of the random numbers with the independent random number generation service used.

3.6 IDO

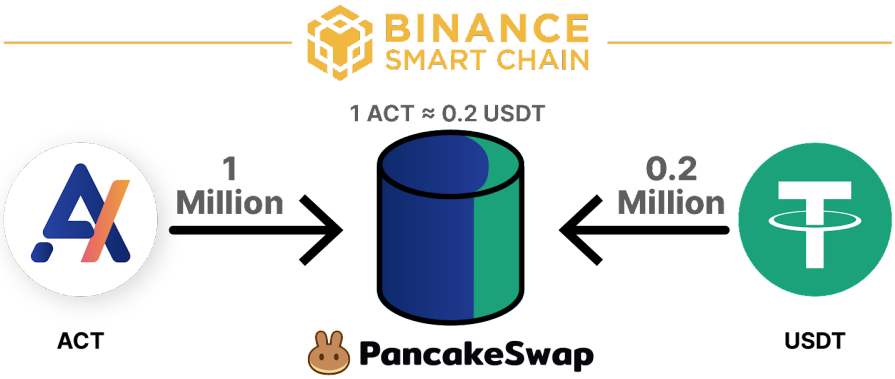
An initial Dex offering, or IDO is a type of decentralized and permissionless concept. When a project launches an IDO, it means the enlistment of coin/tokens on a decentralized liquidity exchange. It is a cryptocurrency asset exchange that uses liquidity pools to trade tokens such as cryptocurrencies and stablecoins. In our case, ACT/USDT, is a liquidity pair.

Goal : people keep buying ACT, and we keep adding ACT

Strength of IDO:

- Immediate Liquidity, less time fundraising, more time building
- Open & fair trading
- Token price is based on quality of the project or service

At the time of writing, our team has already deployed a trading pair of USDT & ACT on Pancakeswap.



1,000,000 ACT to 200,000 USDT
1 ACT ~= 0.2 USDT

3.7 ACT

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- **Access the Alpha Carbon platform:** Players spend ACT in order to play games, buy virtual goods, or pay for chain transactions and services. Developers spend ACT to establish their own tailored made Amino chain and run their games.

- **Governance** : ACT is a governance token that allows holders to participate in Governance decisions of the platform, using DAO structure. They can exercise voting rights on key elements such as reserve grant attributions to content and game developers and feature prioritization on the platform Roadmap. ACT owners can vote themselves or delegate voting rights to other users of their choice.

- **Node Staking** : When Alpha Carbon moves to a Nominated Proof of Stake(NPoS) consensus model, each node operator will need to stake a minimum amount of ACT and ACT holders can also stake in delegation pools to partake in validation rewards. When NPoS is implemented, total delegated stake sizes will determine the node selection. Initially, during the PoA phase, both validators and collators will be required to stake a specified amount of ACT as one of the qualification criteria for running a node.

- **Validation Rewards and Inflation** : Validators will be rewarded for carrying out their duties through the earning of block validation rewards through newly minted ACT tokens. The rate of inflation will be a parameter that can be set through governance voting but will be capped to be no more than 10%

- **Reserve** : The role of the Reserve is to support the ecosystem of Alpha Carbon, offering grants to incentivize high quality content & software production on the platform. The Alpha Carbon team will continue to build, iterate, and innovate, creating a virtuous circle to enable development for greater technology.

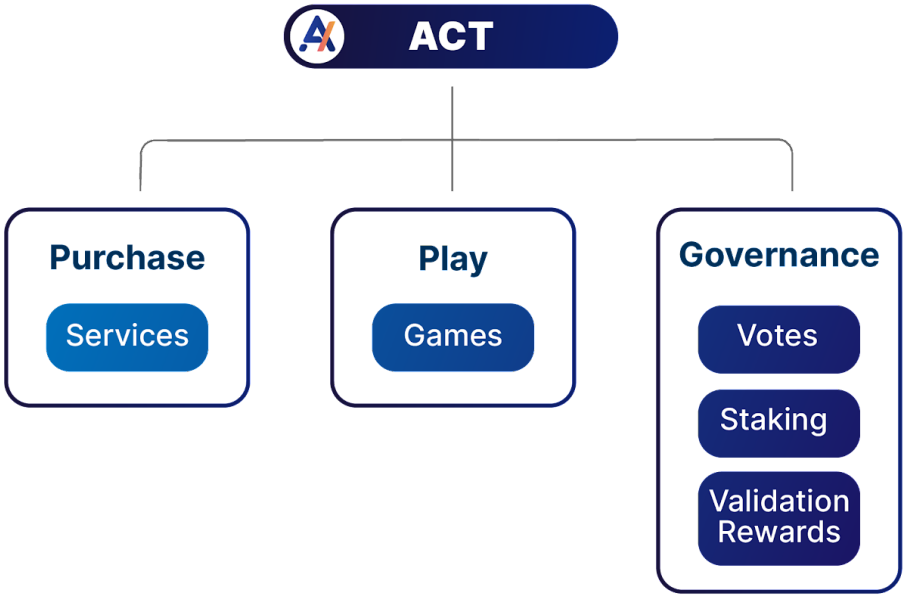


Figure : The Use Case for ACT

3.8 ACT Stakeholders

We have developed a few Stakeholders approach to ensure that the success of Alpha Carbon accrues value towards the token. Therefore, we will set up through smart contracts that revenue generated through Alpha Carbon will be distributed across stakeholders to provide support to the ecosystems of developers and players as well as to provide the resources needed to grow the market and develop high quality user experiences.

4. Technology

4.1 Substrate-based Blockchain

Alpha Carbon is based on Parity's Substrate, a next generation blockchain framework. The framework is provided by one of the most trusted names in the blockchain industry. The framework was selected because of its unique multichain architecture and toolset, enabling high operational throughput, chain isolation capabilities and many other features. Due to the usage of Substrate, an additional benefit is that Alpha Carbon will be compatible with the PolkaDot network4.

4.1.1 Governance

Alpha Carbon is a decentralized network that will be governed by a community of its ACT token holders.

The on-chain governance process will leverage the Democracy, Council, and Treasury pallets provided by the Substrate framework. The intention is to enable key decisions and parameter changes to be made based on stake-weighted votes.

Parameters that can be changed based on voting include:

- …..
- …..
- ….

Other key components of the governance model include:

- **Referendum** - this is a proposal for a change in the Alpha Carbon platform covering system parameters, code upgrades or even changes to the governance structure itself

- **Voting** - Proposals can be voted on by token holders on a stake-weighted basis. Proposals that pass are subject to a delayed execution to allow people that disagree with the direction to exit the system.

- **Council** - this is a group of elected individuals that have special capabilities. Council members are expected to make proposals and have the ability to veto proposals made by the public.

4.2 Smart Contract Engine & Gas Fee Model

In recognition of the large pool of smart contract developers familiar with Solidity, Alpha Carbon has made a focused effort to offer an EVM compatible smart contract engine. Additionally, the blockchain gas-fee model has been designed to offer game developers with flexibility on how they want to offer their game experience.

4.2.1 EVM Compatible Smart Contracts

A key highlight of the Alpha Carbon blockchain is its ability to support Solidity through its EVM compatible smart contract engine. By offering a fully Ethereum-compatible environment, developers can leverage all of the concepts, resources and tools that they are already familiar with such as web3 RPC, accounts, keys, subscriptions, logs and more.

Smart contracts and DApps built for other EVM chains can be ported over to run on Alpha Carbon with minimal effort.

Differences with Ethereum

There are a few differences with Ethereum that are noteworthy. First, Alpha Carbon leverages a PoA based consensus mechanism. This means that concepts such as hashrate, uncles, difficulty etc., don't have any meaning or significance on Alpha Carbon. For APIs that return such values related to Ethereum's PoW, we will return default values and any such details will not have any meaning on Alpha Carbon.

The other important difference is that Alpha Carbon contains on-chain governance features based on Substrate functionality and key parameters can be modified through token-weighted voting.

Lastly, the gas-fee mechanism is different. This will be explained more in section 4.2.2.

Things that are the same with Ethereum

Aside from the areas identified previously as being different, almost all other areas are the same. This means that one should expect minimal changes when porting over DApps and contracts that run on Ethereum to Alpha Carbon.

Alpha Carbon supports:

- Solidity-based smart contracts
- Ecosystem tools such as block explorers, front-end libraries, wallets, etc.
- Development tools such as Truffle, Remix, MetaMask, etc.
- Ethereum tokens via bridges

4.2.2 Flexible Gas Fee Model

Alpha Carbon offers a flexible gas-fee model such that game developers can offer the following gas arrangements to their game players:

- **User-Pays:** This mechanism is similar to the way Ethereum currently works, namely the user account that executes the smart contract, pays for the gas fees.

- **Designated Payers**: This mechanism allows contracts to execute and consume gas fees from designated accounts, effectively allowing transactions to be paid on behalf of a user. Potential users of this model should ensure that they have some means of spam prevention in place.

- **Hybrid Payment**: Alpha Carbon will allow smart contracts to receive a portion of the gas fees from both the User and via designated accounts.

By offering these 3 mechanisms of gas payment, game operators will have the ultimate flexibility to provide offerings to end customers in a manner that best suits their objectives.

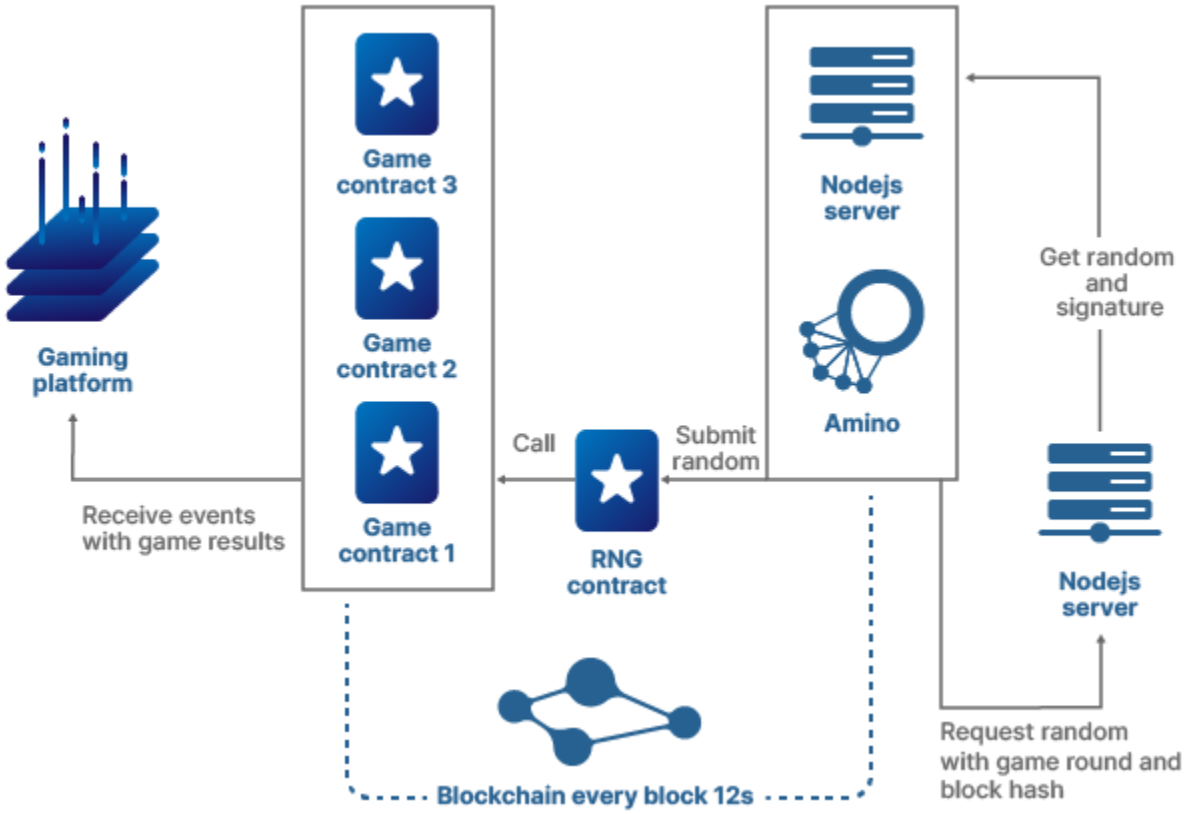
4.3 On-chain Random Number Generator Architecture

Random number generation is at the heart of all digital games of chance. Alpha Carbon provides a ready-to-use on-chain RNG capability that enables players to verify fairness.

4.3.1 Verifiably Fair Architecture

Each amino chain offers the ability to provide a verifiably fair random number for every block that can be used in game contracts. To ensure fairness, an independent 3rd party service provider such as random.org will be used to provide a random number and a signature confirming authenticity of the number.

A worker (Nodejs server) running on the Amino chain first makes a request for a random number for a particular block hash. Random.org will return a random number along with its signature. The worker will then submit the random number to the on-chain RNG contract which will then be used by various games to determine the results of the game.



Players can confirm fairness by verifying that the block that determined the game's results has the signed random number corresponding using a verification page provided on the Amino block explorer. Players can also make a verification by directly matching the logs in Random.org directly.

As a further safety measure, only pre-registered game contracts can gain access to the RNG contract results.

4.3.2 Use Cases

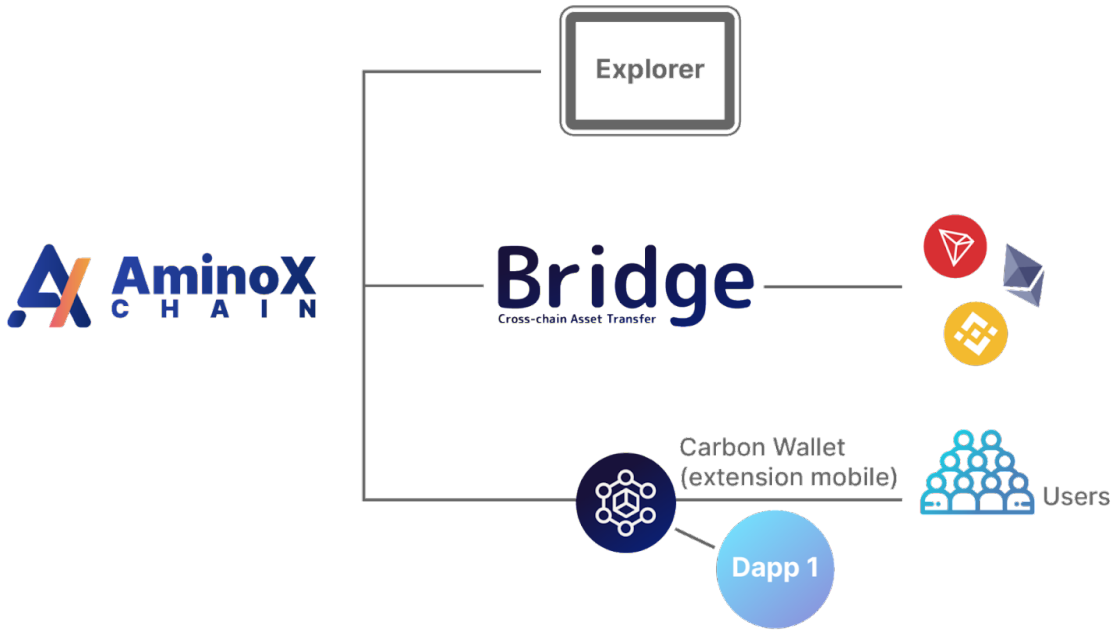
Through the on-chain RNG, game developers have a way to obtain a verifiably fair random number for each block. Game developers can further use the random number as a seed for other game results.

It is envisioned that centralized gaming platforms and DApps can also leverage the on-chain RNG architecture as a source for random numbers and also to record game results to give their players peace-of-mind on the fairness of their games.

4.4 Cross Chain Capabilities

4.4.1 Token Bridge between Alpha Carbon and External Chains

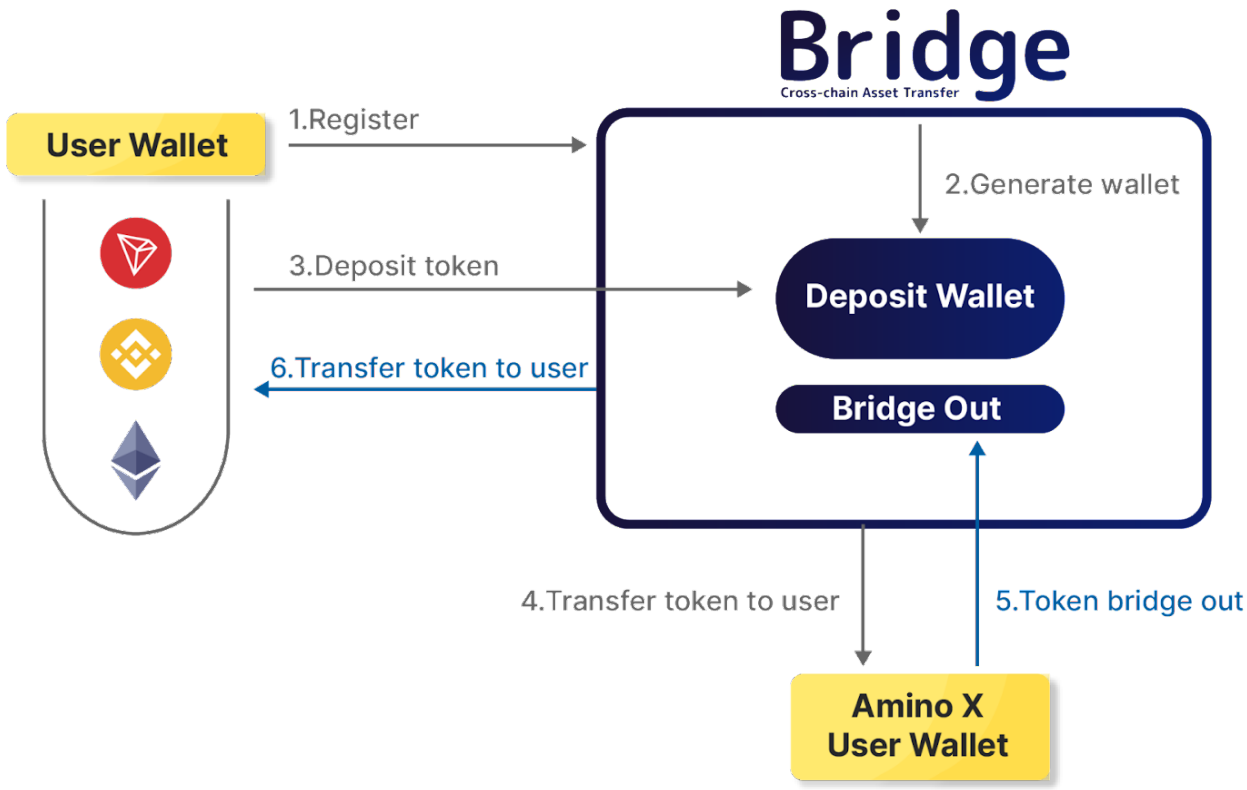
With respect to cross-chain capabilities with external chains, Alpha Carbon offers a Cross-Chain bridge. Unlike typical custody-based cross-chain solutions, Alpha Carbon offers an autonomous toolset that enables transparent decentralized bridging of digital tokens. The general process involves the locking/unlocking of tokens from the source chain (i.e. locking of tokens on Ethereum or Binance smart chain) through the usage of a smart contract on the source chain. A corresponding process will transfer the corresponding tokens on the Alpha Carbon chain.



As shown in the above diagram, the bridge will first handle the token transfer event on the source chain, say AminoX or other mainstream chain, correspondingly send tokens to the user's wallet address to the desired destination chain.

4.4.2 Sample Deposit and Withdrawal Flows

To demonstrate how the cross-chain technologies are used, the following image is the process for Bridge interactions.



Step 1	A User connects his or her wallets to Bridge (Dapp) for account registration.
Step 2	Bridge generates deposit wallet to a specific user
(Deposit) **Step 3** **Step 4**	User deposit desired token to the deposit wallet from step 2
	Bridge will handle deposit event and transfer the tokens to the user on Amino X
(Withdrawal) **Step 5** **Step 6**	User interact with the bridge out function via smart contract
	Bridge will handle withdrawal event and transfer the token to the user's desired destination chain

5. Tokenomics

5.1 Token Overview

The total supply for ACT is 1,000,000,000 tokens.

Alpha Carbon will have its own native token called ACT that will be used for both governance, node qualification staking and payment for chain transactions and services.

5.2 Token Distribution

IDO trading pair on pancakeSwap
1,000,000 ACT to 200,000 USDT
1 ACT ~= 0.2 USDT

5.3 Node Staking

When Alpha Carbon moves to a Nominated Proof of Stake (NPoS) consensus model, each node operator will need to stake a minimum amount of ACT and ACT holders can also stake in delegation pools to partake in validation rewards. When NPoS is implemented, total delegated stake sizes will determine the chances for node selection.

Initially, during the PoA phase, both validators and collators will be required to stake a specified amount of ACT tokens as one of the qualification criteria for running a node.

5.4 Validation Rewards and Inflation

Validators will be rewarded for carrying out their duties through the earning of block validation rewards through newly minted ACT tokens. The rate of inflation will be a parameter that can be set through governance voting but will be capped to be no more than 10%.

A non-profit organization dedicated to Carbon/Amino development will be established, which will control the Foundation funds. The Foundation fund will be used for further development, and growth opportunities.

The reserve fund is the planned amount to be allocated to the Public or Strategic funds as deemed necessary.

5.5 Seed

2 year vesting. Unlock begins on the 10th month.

5.6 Strategic

2 year vesting. Unlock begins on the 4th month.

5.7 Transaction Fees

All transactions can be paid using ACT tokens, and are priced based on the amount of computation and storage used.

6.0 Roadmap

Q1 2023	General payment system POC, draft, design Spec
Q2 2023	-
Q3 2023	-
Q4 2023	-

Reference

[1] Market value of online gaming worldwide 2019-2023
https://www.statista.com/statistics/270728/market-volume-of-online-gaming-worldwide/
[2] Coinmarketcap historical data: https://coinmarketcap.com/historical/