

Tokenomics Whitepaper

September 2022

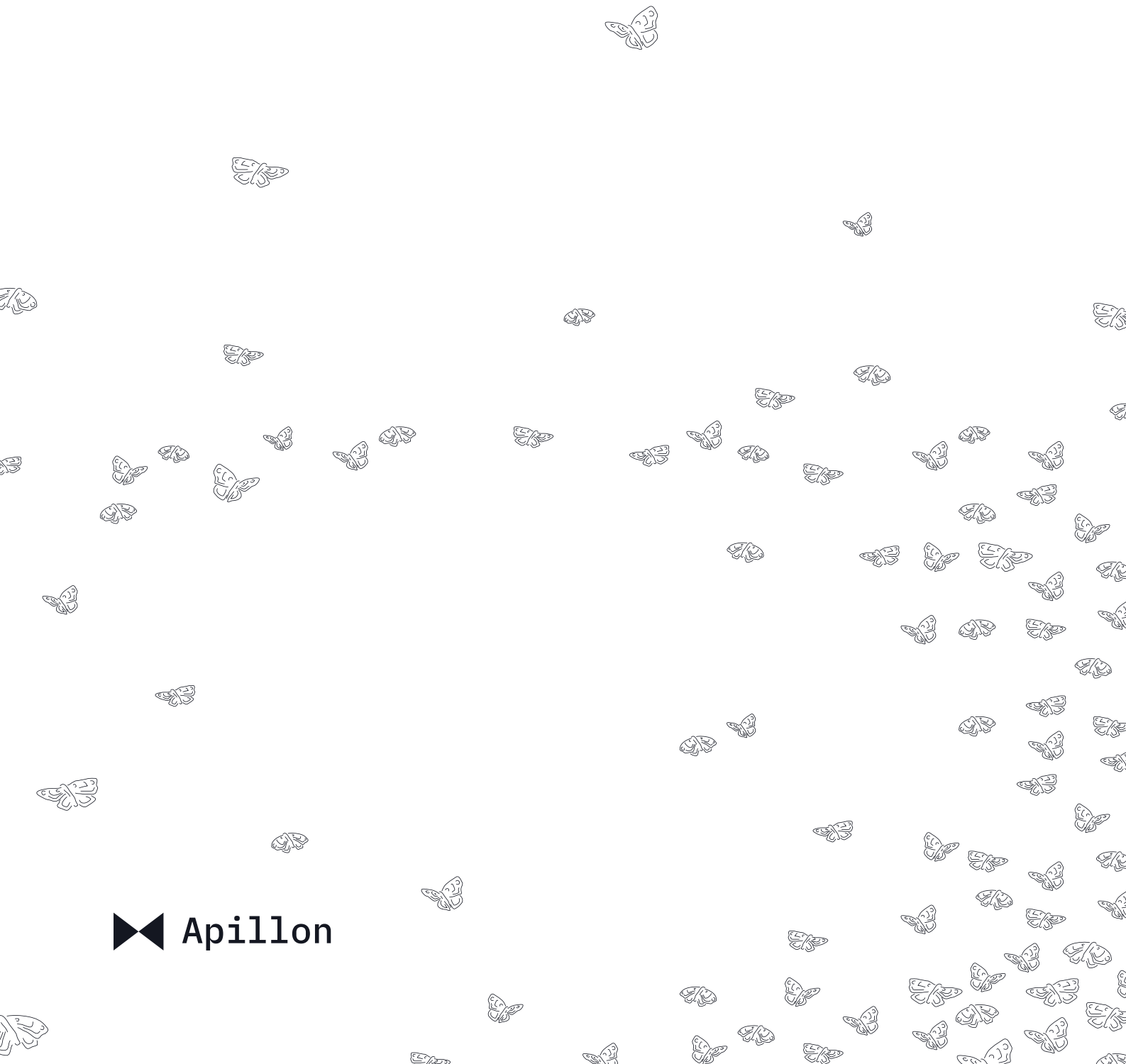


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Introduction

In the Web3 world, there are no products without developers, and no adoption without end-users. The present Apillon's Tokenomics Whitepaper describes how the Web3 technologies, developers and the community achieve momentum that propels evolution of the ecosystem, founded on the most important metric - adoption.

Apillon's tokenomics and business model are interconnected and interdependent. Working in tandem, they represent the economy behind Apillon and its role in the Web3 development platform and the community of its adopters.

As the Apillon platform evolves, the tokenomics and the business model are to be finalized via a three-staged upgrade, as described in the "Three-Stage Economic Model" chapter of this paper.

To gain a high-level product overview and enough context to understand the Apillon platform and its offering, please refer to the Apillon Lightpaper.

Built on Polkadot

With the evolution of blockchain technology, the fields of Layer 1 and Layer 0 blockchain networks are expanding, each with its own purpose. From the vast cosmos of blockchain ecosystems, Polkadot stands out with a clear vision:

“We envision a Web where our identity and our data is our own - safely secured from any central authority.”

– Polkadot network

Expanding on the above, Polkadot’s founder aims to establish the multi-chain web of the future.

“My goal isn’t to build a multi-chain universe. Interoperability is a means of reaching a goal but isn’t the goal itself. My goal is to create Web3, a third generation Internet platform allowing for barrier-less trading and service provisions throughout the realm of human endeavor.”

– Dr. Gavin Wood, Founder of Polkadot

Apillon, the Web3 development platform, follows the vision of a faster and more meaningful world transition to a completely decentralized future of online interactions and value exchange.

Completely aligned with Polkadot’s orientation and aiming to connect exemplary Web3 solutions that cater to the needs of Web3 developers, the Apillon platform is built on the Polkadot Network.

That said, it is important to acknowledge the importance of interoperability for the evolution of the Web3 world and the range of solutions developed in the process. To achieve high interoperability and adaptability to user demands, Apillon remains blockchain-agnostic, agile, and open to adding new and different blockchain solutions and networks as the platform evolves, providing they demonstrate a clear benefit to the platform offering and pass the community governance vote.

Product Overview

Apillon is a Web3 development platform that gathers and delivers complex blockchain solutions and protocols through a simplified and unified API endpoint, allowing developers to build Web3 projects quickly, effectively and with predictable pricing.

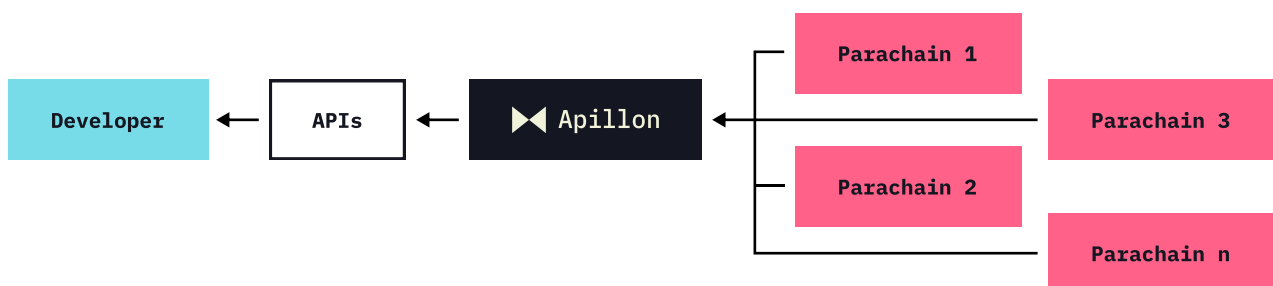
Apillon is determined to continuously improve and upgrade the platform's offering, including through community participation.

The Apillon platform strives to establish a self-governed community that dictates a curated list of API-provided services, catering to every user's needs. It provides a censorship-free environment in which users are incentivized to vote on services to be added to each platform upgrade, thus ensuring that services are added in a democratic fashion.

Challenges of Blockchain Complexity

When building on Web3, be it within the Polkadot ecosystem or in general, developers face challenges that have not been properly addressed.

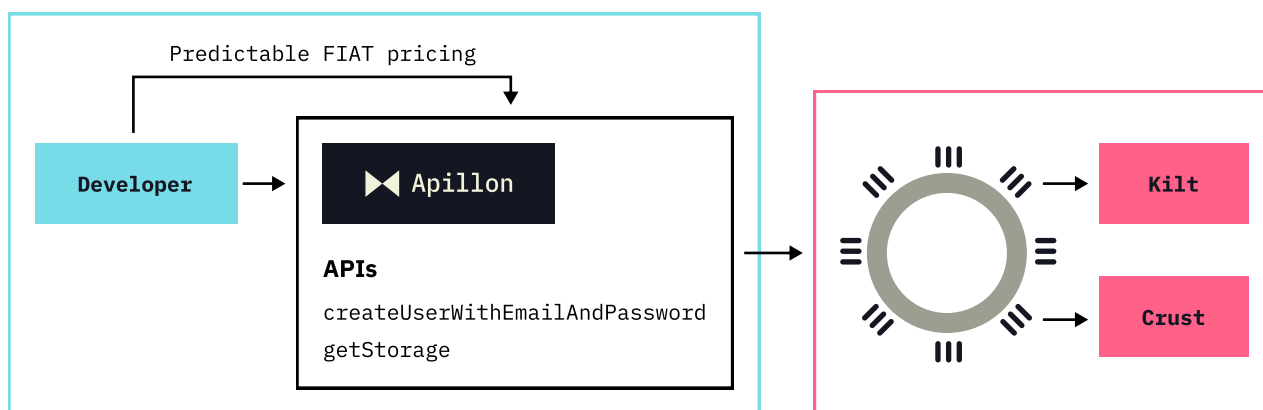
- New monthly protocols and solutions aggravating developer choice
- Each protocol and parachain dedicated to an isolated use case
- Low-level protocol thinking
- Custom token for every protocol
- Potentially high token volatility
- UX and documentation issues



The Apillon platform abstracts the intricacy of linked parachain-based services and delivers them to developers in an easy-to-use format so they can start building a Web3 product from day one, bypassing technological complexity.

Web3 Development With and Without Apillon

Developing a Web3 project utilizing Polkadot parachain services is a complex and lengthy process for a number of reasons. First, each parachain is typically designed to cover a specific use case. Second, they each come with a unique set of rules and a custom token powering their services. And third, merging various parachain services into one Web3 product would require serious work aligning their underlying protocols, continuous testing, and updating.



Example #1: Building on KILT Protocol*

To build a simple Web3 app from scratch that utilizes KILT Protocol for user authentication, a developer needs to do (at least) the following:

- Research the KILT Documentation
- Configure and integrate the KILT Protocol
- Generate and manage KILT's Decentralized Identifiers (DIDs)
- Confirm the validity and functionality of the outcome
- Handle the custody, purchase, and payments for KILT tokens
- Maintain and upgrade the end-product via protocol upgrades

Using the Apillon platform, on the other hand, a developer simply calls a function (e. g., `createUserWithEmailAndPassword`) from the Apillon SDK with the required parameters. This function creates a fully working user DID in the back-end.

Example # 2: Building on Crust*

To build a simple Web3 app from scratch that utilizes Crust for file storage, a developer needs to do (at least) the following:

- Research the Crust Documentation
- Configure and integrate the Crust Protocol
- Handle the custody, purchase, and payments for CRU tokens
- Manage the FILE expiry
- Maintain and upgrade the end-product via protocol upgrades

Using the Apillon platform, on the other hand, a developer simply calls the `getStorage()` SDK function and moves the files to a decentralized, pinned service provided by Crust and IPFS.

In both cases, the resources spent on building a functional Web3 application with Apillon is drastically reduced, and the product's go-to market trajectory is much shorter and streamlined.

**Disclaimer: These examples are technically highly simplified to illustrate the problematic context of building a Web3 product for the general public, whereas in technical reality, the process is much more complex. Examples used do not intend to imply in any way that either KILT or Crust are challenging to use, but merely to show that these processes require serious work and introduce friction in cases where developers utilize several parachains to build a single solution.*

Tokenomics Actors

There are three main actors contributing to the tokenomics of the NCTR token and Apillon's business model.

- Apillon platform users
- NCTR token holders
- Resource providers

Apillon Platform Users - Build, Govern, Improve

“Developers, developers, developers.”

– Steve Ballmer, CEO at Microsoft, during the keynote at a 2009 developer conference

Developers are the force that drives Web3 and the first group of participants in the Apillon tokenomics.

To cater to their ever-evolving needs, the platform is designed to respond to their expectations, challenges, and workflows, but also to empower them to voice feedback and impact the course of product development through governance.

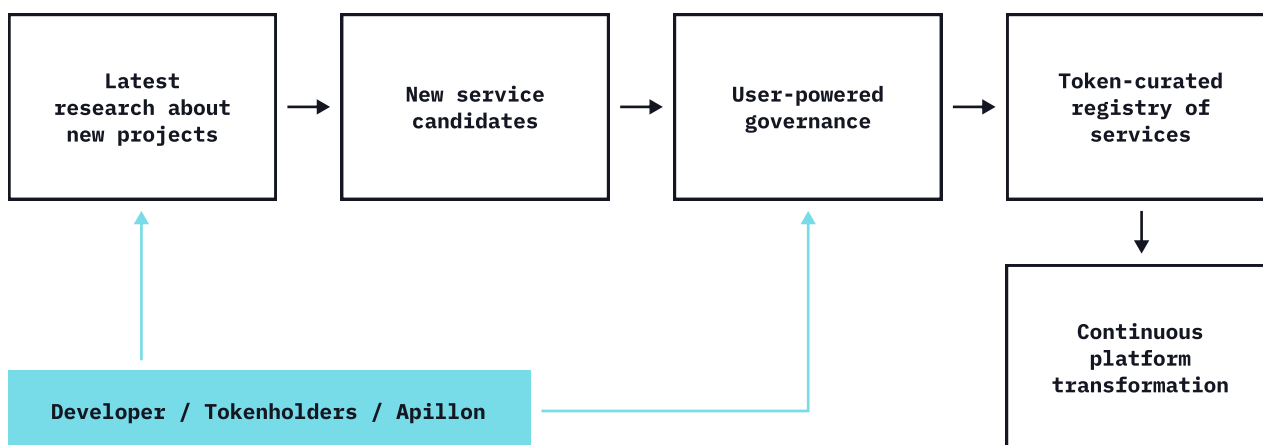
The Apillon platform MVP includes three primary services that represent the minimum toolset to build a fully Web3-compliant product:

- Web3 Identity
- Web3 Storage
- Web3 Compute

Beyond the initial three services, the Apillon platform is designed to expand to hundreds of services and protocols as well as to augment the tooling developers can use in their workflow.

In a vast and ever-evolving field of blockchain technology, it is increasingly challenging for all stakeholders to follow all the newly launched projects and evaluate their offerings. To double down on the Web3 research power, Apillon empowers its main users, the developers, to list new service candidates via governance, and vote on preferred services to be implemented in the upcoming platform upgrades.

Through user-powered governance and token curated registry of services, the platform continues to evolve and optimize its offering while preventing any potential censorship.



NCTR Token Holders - Promote, Vote, Grow

No Web3 project can stand the test of time and market without community backing. The Apillon community is made up of NCTR token holders, developers, and ambassadors.

The NCTR token is designed to serve and reward everyone that contributes to the growth of the Apillon platform and directly boosts Web3 adoption, aligned with Apillon's primary mission.

All NCTR token holders can be Web3 builders, either by developing functional Web3 products or growing the ecosystem, and thus have the right to contribute to the NCTR token staking and Apillon's inclusive governance.

More on the role of NCTR token in the Token Utilities section.

Resource Providers - Provide, Install, Expand

In bringing the Web3 technologies to users' desktops through a unified gateway, the Apillon platform MVP primarily connects existing resource providers (i. e., Polkadot parachains) with buyers (i. e., developers).

Currently, the supported decentralized services, such as storage with IPFS by various providers within the peer-to-peer network, as well as the quality and speed of data transfer, depend on the location of contributors. A similar dependency applies to other parameters, such as compute power, or nodes that form a chain providing decentralized identification or authentication.

In the initial stage, Apillon mostly utilizes existing offerings, serving as a router that provides them to end user. In later stages, however, the platform aims to provide one-click installation packages for users who want to become resource providers. This would directly expand the underlying decentralized network and promote broad Web3 adoption, especially for the services that have been supported on the Apillon platform since day one.

The process of resource or service provision is sustained by three constituents - the resource provider, the buyer, and the router.

The Resource Provider

The resource provider is an entity that installs Apillon's one-click pre-configured virtual machine and enables storage, computation sharing or even node hosting services within the Apillon ecosystem of supported protocols. They are rewarded with an NCTR value equivalent to the tokens of the underlying parachains or protocols, based on the resources they contribute to the network, such as processing power, RAM, disk space, etc. Rewards are emitted in a scheduled, single-asset payout scheme with high liquidity and reduced risk of volatility.

The Buyer

The buyer is an entity that develops Web3 applications or Web3 websites using the Apillon platform and pays for underlying services in fiat money. To cover the costs of provided services

in a predictable manner, a payment module is integrated into the platform that utilizes native NCTR tokens as a vehicle to reduce the volatility risk associated with each supported protocol.

The Router

The router is the Apillon platform itself. It routes API requests from users to transparent actions on the blockchain, bypassing the underlying complexity. Moreover, the platform can also route the value from buyers to producers of provided services. Value transition is carried by the NCTR token to ensure the platform controls the matching of resource orders and thus provides a more stable charging of credit for both parties.

Three-Stage Economic Model

The blockchain space is notorious for delivering projects with over-promised tokenomics and complex business models, but under-delivered in reality. Too often, they undergo heavy tweaking before the end result matches the planned details and provides solid foundations for product-market fit.

At Apillon, we acknowledge the fact that good tokenomics and business models are correlated, interdependent, and rely on user demand.

In the course of its MVP development, Apillon is set to start a three-stage tokenomics and business model release cycle, spanning across a maximum of 24 months. In each stage, the gathered data will either lead to confirming or rejecting the project's predispositions and thereby help to improve the tokenomics and business model to better suit the customers' needs.

After each stage, we will issue a report on the data collected and the subsequent decisions, course adjustments, and actual formulas applied for evaluating every feature, token utility, and payment plan.

STAGE	TOKEN UTILITY	PAYMENT PLAN
1	Staking Governance	Freemium Plan
2	Staking Governance Incentivization Payments	Freemium Plan Paid Plan
3	Staking Governance Incentivization Payments Value Exchange PoA - Proof of Adoption	Freemium Plan Paid Plan Custom Plan

Stage 1 - Staking, Governance

In the first stage, Apillon's tokenomics and freemium plan have two main objectives:

- To allow users to stake the NCTR token and participate in platform's governance
- To use the platform free of charge and promote Web3 adoption

At this point, the free-to-use platform immediately starts to communicate with developers and invites them to submit proposals for its improvement.

The freemium model is an essential prerequisite for building a prototype of a payment system in the background that is able to cover the expenses of each service provided on the platform and translate those costs into fiat-valued credits. This process would set the foundation for the payment model developed in later stages.

Stage 2 - Incentivization, Payments

In the second stage, the Apillon platform introduces Token Incentivization, which directly rewards developers with the highest platform adoption rates. Incentivization is further described in the following chapters.

Users also have the ability to upgrade to the first paid plan that calculates credit costs based on the platform calibration and data from the freemium plan, introduced in Stage 1.

To provide paid plans fairly and successfully, the platform is set to undergo the following upgrades:

- Credit score value calculation and optimization
- Staking and service payment using the NCTR token
- Fiat payment converted to the NCTR token to cover the employed services
- Cost reduction through NCTR staking

Stage 3 - Value Exchange, Proof of Adoption

In the final stage, Apillon's tokenomics model introduces the third participant - Producers. The details on how the NCTR token model employs resource providers are further described below.

In this stage, the platform boasts stable credit scoring, a clearly calibrated payment plan for the provided technologies, and a fully established governance structure driving the underlying protocol support.

To fully expand and unlock our services to the Enterprise level, a Custom plan is introduced to serve as a flexible payment scheme, which is the type of scheme that is typically sought by enterprise clients.

Token Utilities

The NCTR token is designed to be a multi-purpose and widely used asset, covering a range of utility cases for platform users and community members.

Proof of Adoption

To accelerate the Web3 adoption in a meaningful and measurable way, it is necessary to implement clear metrics that anyone can follow. Working towards the ultimate goal of onboarding as many users as possible to Web3, the platform implements the “Proof of Adoption” (PoA) metric. This metric also has a role in rewarding developers.

Since adoption can be measured in many ways, PoA is not solely tied to counting user registrations. Initially, it would mostly measure the use of Apillon’s Identity service, which directly demonstrates the number of users a single developer has registered on Web3 through the platform. Besides Identity counts, the platform would also develop a specific metric for counting API calls, as well as a thorough Web3 usage analysis. Together, they would uphold a complete PoA model in the later stages of Apillon’s tokenomics implementation.

Proof of Adoption serves as the main umbrella term for Web3 adoption through Apillon and is the platform’s main driver for decision-making between individual stages of tokenomics and business model development.

Governance & Platform Upgrades

The governance utility of the NCTR token allows NCTR token holders to submit proposals for new services to be supported by the platform, vote on them, and co-govern the development direction of the Apillon platform to best respond to users’ needs and enhance their Web3 building experience.

Apillon’s main objective is to evolve into a self-governing platform, built and run by developers for developers. However, achieving a complete platform governance by NCTR token holders is not a straightforward task.

There are multiple challenges to be addressed, such as how to balance voting power, how to achieve a high level of participation, how often to vote on a decision, and what is the maximum impact a decision should have such that token holders are not overwhelmed. As Apillon addresses all the above and optimizes the token governance structure, the final governance scheme will be rolled out slowly, carefully, and in stages.

A three-staged governance approach ensures that enough quality participants have the opportunity to join in, and to gradually increase its importance until Apillon truly becomes a platform built by developers for developers where everyone has their say.

Stage 1 - Platform Adoption, Token Ownership, Governance Participation

The main factors that impact Apillon governance are platform adoption, NCTR token ownership and staking, as well as voting participation.

Platform Adoption

The main purpose of Apillon's governance scheme is to steer platform development and decide on which upgrades to adopt; for example, which parachains to integrate next, and in what order. To incentivize platform adoption, the NCTR token holders who are also platform users will have more voting power than non-users.

\$NCTR Token Ownership and Staking

Apillon is heavily inspired by the Polkadot 2.0 governance system. In the initial stages, the power of a user's vote depends on the amount of NCTR tokens held by the user, and could increase with the number of NCTR tokens staked in a specific vote for a period of time. For example, if a small token holder wants their opinion to count more, they can lock tokens for a year, thereby increasing their voting power.

Voting Participation

Participation likewise plays an important role in governance. Apillon incentivizes users to vote in large numbers to reflect the will of the Web3 builders community. Many other projects already

enable user-powered governance, but too often, the proposals in question don't have much impact on the token holders, causing a struggle to attract voter participation. On the contrary, since the Apillon platform benefits active developers who use it frequently, NCTR governance directly impacts voters upgrading a tool they use on a daily or weekly basis, incentivizing every user to participate. Designed as the go-to developer tool, the platform regularly informs users about active proposals and guides them through a streamlined voting process.

Stage 2 - Incentivized Onboarding

In the second stage, Apillon will emit NCTR tokens as rewards for token holders who onboard new users to the platform.

This will incentivize current developers and award NCTR tokens to the platform's most active users based on their activity, thus giving them more voting power in governing platform development.

Stage 3 - Voting on Other Activities

In the last stage, governance participants will also vote on decisions beyond the Apillon platform, such as those regarding other activities in the ecosystem.

In this case, developers will not have weighted votes.

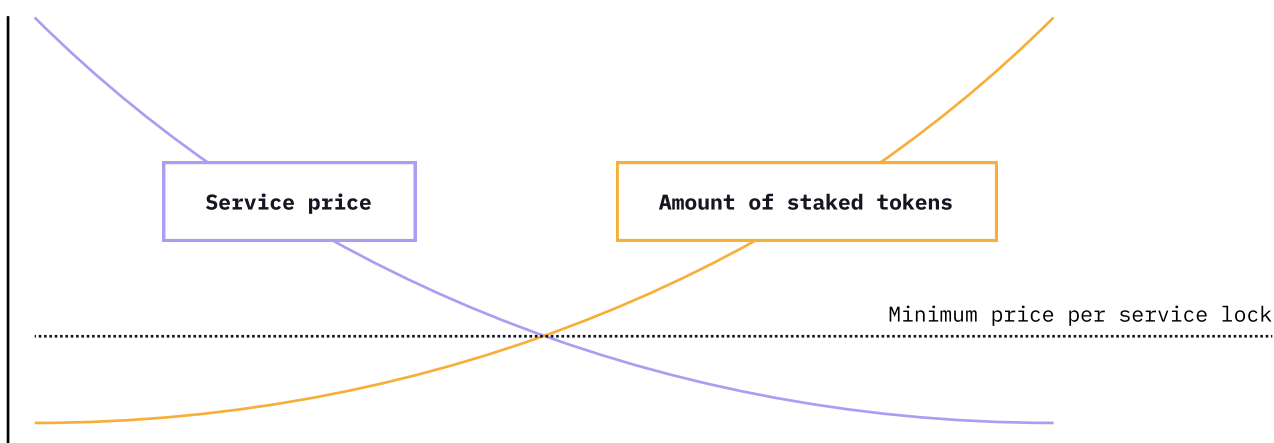
Staking & Service Discounts

The Apillon community, users, developers, and NCTR token holders, are invited to co-govern the future of the Web3 development platform via NCTR token staking.

To achieve a product feedback loop with our community, Apillon aims to establish a healthy governance model and promote good turnout, and to incentivize users to stake their NCTR tokens long-term.

Incentivization is achieved via pricing discounts on platform services offered to NCTR token stakers who participate in the governance process and help shape the future product.

Moreover, users staking NCTR tokens get access to premium support, team consulting and other perks that are to be determined during the Stage 2 of tokenomics implementation.



USER LEVEL	AMOUNT STAKED	PRICE	BENEFITS
1	x,000.00 NCTR	xxx,000.00 EUR	Standard Access
2	xx,000.00 NCTR	xx,000.00 EUR	Support
3	xxx,000.00 NCTR	x,000.00 EUR	Premium Support

Incentives & Grants

AOTW - App of the Week

Utilizing their governance power, NCTR token holders can propose innovative apps for a weekly competition and vote for their favorite choice. This way, innovation and community adoption get rewarded in a fast and measurable manner.

SDK Grants

To speed up the development around the platform's API endpoints, language-specific SDKs are essential. A portion of the NCTR token supply is dedicated to provide grants for developers or teams who will help the platform achieve horizontal support with the multiple frameworks used currently in web development, new and improved SDKs, client libraries, code snippets and general documentation.

Protocol Integration Grants

Apillon's back-end relies on an agnostic architecture and accepts integration of various additional modules that translate the blockchain complexity of underlying protocols through the platform APIs.

To scale and expand faster, Apillon plans to fund grants for developers or teams committed to integrating new protocols into the platform.

Bug Bounties

Bug bounties are a commonly used approach to quickly locate and fix occasional bugs on the Apillon platform. A part of our token supply will be allocated for Bug Bounties to improve production standards and general security of the platform.

Reusable Code Snippets

SDKs or frameworks can go a long way, but often a simple code snippet with a dedicated guide or a tutorial works wonders. To encourage the creation of tutorials to deepen the knowledge pool, a portion of community tokens will be allocated to reward the publication of code snippets with corresponding tutorials.

Fair Play Staking

To implement the Web3 principles and standards, developers can contribute to fair play on the platform by staking NCTR tokens. The fair play mechanism allows developers to stake NCTR tokens as insurance for guaranteeing the legitimacy of their product. This way, a controversial project could be reprimanded, in severe cases even leading to their tokens being slashed, or to the direct sanctioning of developers that are not playing fairly. This feature is optional for developers who are looking to promote Web3 ethics in their own projects.

Once enabled, this utility represents perfect equilibrium between the Apillon platform as a provider, developers, and their end users, since all three have a stake involved.

Build Once Sell Often

Through the aforementioned incentive programs, developers would be able to apply for Apillon grants for developing a resellable application on the platform.

Such software applications would then be sold via an internal marketplace where the NCTR token represents a value transfer vehicle between developers-sellers and developers-buyers who seek to quickly utilize an already established application in their next project.

Technical Token Parameters

The \$NCTR token is an ERC-20-compatible token minted on the Moonbeam Network.

Total supply: 150,000,000 NCTR

Community Share

Apillon reserves 20,000,000 NCTR tokens for the community. These tokens will be distributed in different ways within a span of four years after token launch primarily through staking, governance, and platform adoption incentives.

Staking Rewards

Rewards for staking NCTR will be distributed linearly, over a span of four years. The same amount of tokens will be released into circulation each month based on user stake share, and will be withdrawable at any time. Such a distribution will ensure higher yields in the beginning when less NCTR tokens are in circulation, thereby rewarding long-term users.

The exact amount of tokens reserved for staking will be announced at the token generation event.

Join Apillon

Web3 will not build itself. Go and add your block.

E-mail: info@apillon.io

Website: apillon.io

Wiki: <https://wiki.apillon.io/>

Telegram: <https://t.me/Apillon>

GitHub: <https://github.com/Apillon-web3>

LinkedIn: <https://www.linkedin.com/company/apillon>

Twitter: <https://twitter.com/Apillon>

Reddit: <https://www.reddit.com/r/Apillon/>

Discord: <https://discord.gg/yX3gTw36C4>

Medium: <https://medium.com/apillon>