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Testimony of Daniel Schoenberger

Chief Legal Officer, Web3 Foundation

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On behalf of the Web3 Foundation and the Polkadot ecosystem, I would like to thank Chairman McHenry, Chairman Thompson, Chairman Hill, Chairman Johnson, and Ranking Member Waters, Ranking Member Scott, Ranking Member Lynch, Ranking Member Caraveo, and other members of the committees for the opportunity to testify today regarding blockchain technology and the benefits Web 3.0 ("Web3"), the next iteration of the internet, will bring to the entire world. We are at the forefront of Web3, which will give more control back to individuals and provide efficiencies and innovations not yet imagined.

I am Daniel Schoenberger, the Chief Legal Officer at the Web3 Foundation. I joined the Foundation following a lengthy tenure at Google as Head of Legal for Switzerland & Austria and their EMEA Legal Lead for AI Policy. I have worked at the intersection of emerging technologies and law, ethics, society, philosophy, and public policy for more than 20 years.

Web3 Foundation

The Web3 Foundation ("the Foundation" or "W3F") was established in Zug, Switzerland, by Dr. Gavin Wood, former Co-Founder and CTO of Ethereum, and Founder of Polkadot.

Upon the completion of Ethereum, Dr. Wood was interested in how to provide an ecosystem where end users would not be required to purchase tokens for every transaction. Dr. Wood's view was that, ideally, every transaction should not require a token purchase. He believed that this requirement would ultimately become a barrier to blockchain adoption and that, as network usage grows, transactions should become less expensive due to scale, not increasingly expensive and slower to settle due to growth itself creating a bottleneck. As an unintended consequence, Ethereum's design also favored initial entrants to the network, a distinction that was counter to the ethos of Web3 – access by all.

Established on June 16, 2017, the Foundation was founded as a *Stiftung* under Swiss law. Under Swiss law, a *Stiftung* may only be formed for a specific and not-for-profit purpose and is subject to Swiss regulatory supervision to ensure that it acts in a manner consistent with such purpose. A *Stiftung* can be compared to an irrevocable trust under U.S. law, because, once set, a *Stiftung*'s initial purpose is very difficult to modify.

The Foundation was formed with the goal of establishing Web3. The Web3 vision was to provide a new internet infrastructure for any vertical and any use case. It wasn't about building a currency like Bitcoin, or a smart contract platform like Ethereum. It was about giving all of the siloed blockchains the ability to communicate with each other. To realize this vision, W3F conducts and funds research and development teams building the stack of technologies that form the basis of the decentralized web. Consistent with this broad goal, the Polkadot Network was built and

launched over a five-year period. The network's codebase and developer tooling were released as open-source software.

The Foundation's explicit purpose is set forth in its Notarial Deed:

> "*The Foundation's purpose is in nurturing and stewarding cutting-edge technologies and applications in the field of cryptographically-powered decentralized software protocols. A dominating but not exclusive focus is set on the research, development, deployment and maintenance of the "Web 3.0" technologies […] as well as the advocacy, education, developer-adoption, support of middleware and base-layer/demonstration applications relating to this protocol set.*"

The Foundation is supervised by the Swiss Federal Supervisory Authority for Foundations (ESA) and is in good standing with the regulator, and the Foundation is audited on a yearly basis by a third-party auditor.

Web3

To truly understand the impact of Web3, we must understand how we arrived at this point. The earliest iteration of the internet is known as Web 1.0. Web 1.0 was extremely limited, but it offered the opportunity to distribute information to large audiences across the world. Content was created by a small number of creators and was static. Information was simply posted and made available for users to view. This was known as the read-only internet. Users were able to read and access posted information. It was essentially a digital encyclopedia. There was no ability for two-way interaction. There were little to no visuals, controls, or the ability to easily refute information presented.

Web 2.0 is the internet we know and use today. As social media platforms and online businesses began to emerge, the internet transformed into Web 2.0. This upgraded internet features dynamic, interactive web pages, where users can read and write information as well as publish their own content for others to see. However, this version of the web comes with downsides, particularly with regard to data control, privacy issues, and the consequences of trust. Unfortunately, in the current construct of the internet, people have become the product. For instance, it may appear that a social media platform is the product which the user consumes, however, the fact is the user is the product being sold to advertisers and data aggregators that want to learn and/or influence the user's behavior. This is where Web3 comes into the picture.

Web3 is taking centralized infrastructure and applications and turning them into decentralized, trust-free protocols. The goal is to transform the internet into a decentralized web, where users control their own data and identity in a trust-free environment – trust-free meaning that trust is not placed with third parties to fulfill their part of the deal or to protect user data, but data is controlled by the users themselves. The Web3 movement aims to remove intermediaries and build trust-free infrastructure.

The Polkadot Network

In accordance with its purpose, the Foundation has developed a blockchain-based layer 0 protocol, known as the Polkadot Network, with a goal of progressing blockchain technology.

At its core, Polkadot is a piece of network infrastructure, a Web3 protocol that facilitates the innovation of developers and enables the growth of a Web3 ecosystem. It is a layer 0 blockchain

and operates one layer below incumbents like Bitcoin or Ethereum. Unlike many of the most popular names in Web3 technology, Polkadot is not a cryptocurrency or exchange. Rather, Polkadot is a vertical agnostic, use case agnostic infrastructure software platform upon which blockchains can be built — a blockchain of blockchains, exponentially increasing the capabilities of Web3 technology. While blockchains have demonstrated great promise in several fields — Internet of Things (IoT), finance, governance, identity management, web decentralization, and asset-tracking to name a few — design limitations in previous systems have largely hindered large-scale adoption.

The Polkadot Network is a next-generation blockchain protocol with the goal of uniting a wide network of purpose-built blockchains, which would allow such blockchains to operate together, sharing security seamlessly and at scale. Polkadot was created to allow developers to build new blockchains, to allow new and existing blockchains to communicate with each other, and to secure unique blockchains in a single ecosystem, whether they be public, permissionless networks, private consortium chains, or other Web3 technologies. It enables an internet where independent blockchains can exchange information under common security guarantees. This creates a level of interoperability and global scalability found on the Web 2.0 internet we use daily. The Polkadot Network has been designed with the intention that any type of data may be sent between and among any types of blockchain, potentially unlocking a wide range of real-world use cases, permitting new decentralized marketplaces to emerge, and offering fairer ways to access services through a variety of decentralized applications (DApps) and providers.

For comparison, think of Polkadot as the SMTP protocol (Simple Mail Transfer Protocol) of the internet used to send and receive email and Layer-1 blockchains such as Bitcoin or Ethereum as email providers like Yahoo or Google. Polkadot is the underlying infrastructure that allows these distinct programs to communicate with a seamless connection or interoperability. Without this infrastructure, this would not be possible. For example, Yahoo email account holders would be limited to communicating with other Yahoo users, requiring a user to create additional accounts to communicate with those using different email providers. However, the underlying infrastructure of the SMTP protocol allows someone to use any email provider to communicate with other email providers' users. Polkadot provides the same benefit to Web3 technologies. It breaks down the existing silos between incumbent blockchains. Polkadot provides pooled security, low friction, and full operational interoperability allowing otherwise siloed blockchains to connect and operate harmoniously at the scale of global commerce.

Polkadot has a democratized and fully on-chain form of governance in which only DOT holders determine the fate of Polkadot. All upgrades and changes to the protocol are subject to a proposal and referendum process by the developers/users operating in the ecosystem, and the protocol uses a proof-of-stake model to secure the network and verify transactions. Polkadot also maintains its on-chain treasury. Validators secure the network by staking DOT to run validating nodes and perform full verification of the Relay Chain. According to a recent study, Polkadot has the smallest carbon footprint within the industry, while being the largest decentralized autonomous organization (DAO) in existence. In addition, based on a recent independent study of blockchain protocols, Polkadot ranked at the top of the industry on the key industry metric used to determine the level of decentralization of a blockchain. With OpenGov soon to be launched, Polkadot will push the limits of decentralized governance even further.

At present, while certain blockchain networks permit decentralized transaction validation to occur on a specified blockchain, such validated transactions cannot be recognized on a different blockchain in a decentralized, cryptographically secure manner. Many within the digital asset space believe that achieving such recognition, or interoperability, securely across blockchains,

represents a critical step to enable a truly decentralized and scalable digital world. Scalability and frameworks for the governance of blockchain protocols have, in parallel, emerged as challenges to their usability — and decentralization.

The Foundation believes that the Polkadot Network's design, which includes Parachains and the Relay Chain (each as defined below) permits increased security for each individual Parachain as the total number of Parachains increases (i.e., that the Polkadot Network security effectively would be additive and cumulative across, rather than being divided among, Parachains) – in contrast to contemporary scaling approaches that divide the security and leaves the community vulnerable to its weakest link. Polkadot is closer to solving the blockchain trilemma between security, scalability, and decentralization than many other major blockchain projects.

Parachains

The Polkadot Network permits the decentralized development and operation of multiple blockchains, known as Parachains, which may be public or private, general or application specific. Individual Parachains may interact with one another through the base-layer Polkadot Network blockchain, referred to as the Relay Chain as well as with certain blockchains developed outside the Polkadot Network and connected via a Bridge Parachain.

The Polkadot Network's sharded architecture is designed specifically with a goal of maintaining network security as the number of Parachains increases. For that reason, the Foundation believes that blockchain projects and developers may be able to achieve a more secure network (and at a lower cost) by building a Parachain, rather than creating their own standalone blockchains.

Instrumental to the Polkadot Network's use is the technology stack Substrate, an open source-licensed set of tools, frameworks, and a programming language built by Parity Technologies (the Foundation's implementation partner), including for use in the Polkadot Network, that allows developers to build Parachains, DApps, and other blockchains in a highly customizable manner.

In addition, at least 600 companies and projects, including well-established, high-profile and household name organizations, are building blockchains on top of Polkadot. This includes more than 300 DApps and nearly 90 parachains that use infrastructure in connection with the Polkadot Network. Of them, approximately 59 are using Substrate infrastructure.

DOT: The Native Token of the Polkadot Network

The native token of the Polkadot Network is a blockchain-based, cryptographically-secure token known as DOT. It should be thought of as the orchestrating tool used to secure and govern Polkadot. Polkadot's ongoing operation requires DOT to be immobilized, bonded, or free-floating, as applicable. DOT's utility facilitates staking and governance of Polkadot. Additionally, DOT is used to obtain a Parachain slot.

Those who wish to create a Parachain must access free floating DOT to participate in a parachain slot auction. Similar to a business that leases a location in a shopping mall for a certain period of time, Parachain winners secure a lease of capacity in the Polkadot network for up to two years at a time. However, the DOT that is used to "lease" a parachain is more like a deposit, in that there are no ongoing payments, and the full amount of DOT is returned in full to the Parachain lessor and to the community participants at the end of the contract. During this time, the DOT used to secure the parachain is not traded or invested. This DOT is essentially locked on-chain during

use of the parachain slot. DOT is inherently interwoven with the Polkadot Network. Polkadot cannot exist without DOT and vice versa. Thus, like the overarching Polkadot Network, DOT is a piece of network infrastructure.

Launch of Polkadot

The journey of Polkadot began with the vision of an internet where developers and users have control, and the rules of the protocols are created and changed by developers and users by coming to a consensus. To facilitate the creation and launch of this ecosystem by providing both funding for the development of the platform and providing stakeholders with a critical component necessary to build on the platform, a token to be delivered at network launch, DOT was sold in private sales from 2017-2019. The purchasers of DOT were the non-U.S. developers and other entities that would build on the infrastructure created by Polkadot or expressed their interest in otherwise engaging with the Polkadot Network, e.g. by staking, validating, or participating in the Polkadot governance.

The Foundation began engaging with the Securities and Exchange Commission (SEC) in November 2019 – months before the actual launch process of Polkadot commenced in May 2020 – because the Foundation wanted to ensure compliance with U.S. securities laws. The Foundation believes that very few blockchain protocols, if any, engaged with the regulator in a way that altered their launch processes as it did with Polkadot. Each step of the launch process complied with U.S. federal securities laws. Throughout what turned out to be more than a three-year engagement, the Foundation adhered to generally accepted investor protection principles, both in practice and in spirit. In fact, to the Foundation's knowledge, only about one percent of initial coin offerings (ICOs) had made filings with the SEC with respect to exemptions from registration at the time of DOT's initial sale, and far less, if any, voluntarily shared offering documents, sale details and process, and exemption filings to be evaluated by the SEC.

W3F treated DOT as a security under U.S. federal securities laws during the private sales with the understanding that the determination of whether a token is a security is determined at the time of its offer and sale, not at the time of the token's delivery. Therefore, as indicated by the Telegram case, DOT was also treated as a security when it was delivered to initial purchasers.

DOT were offered, sold, and delivered pursuant to and in accordance with Regulation S and D, which provide exemptions from registration under the Securities Act of 1933 (as amended, the "Securities Act") and allowed for the sale of DOT to investors outside of the U.S. and to accredited investors. Before delivering DOT, W3F confirmed the identity of the original buyer through KYC and AML checks and additional due diligence. At delivery, W3F reconfirmed eligibility for the applicable exemptions which were in place at the time of the sale (e.g., location of purchaser, accreditation, and other requirements for exemption).

In August 2020, users received their tokens and began staking and declaring their intent to become stakeholders of Polkadot, and even earlier – in July of the same year – W3F removed the Sudo key giving up centralized control over Polkadot. This is considered by the Foundation to be the moment of decentralization because the Foundation no longer had the ability to "roll back" the network to make changes; all future updates would come from community governance, moving another step closer to complete decentralization. Finally, in December 2021, the launch process according to the Polkadot Whitepaper was complete when the first Parachains were launched.

DOT is no longer a security according to the Howey Test. DOT satisfied the factors set out in the Framework for Investment Contract Analysis of Digital Assets issued by the SEC's Strategic Hub for Innovation and Financial Technology (FinHub), indicating when a token initially offered and sold as part of an investment contract, and therefore a security, may be reevaluated and may no longer be a security. In addition, the Foundation has delivered what was promised in the whitepaper, and Polkadot has long been decentralized. Given DOT's functionalities and properties as digital representation of its holder's right to access and participate in the Polkadot Network, the Foundation thinks of DOT as merely coordinating software. The Foundation suggests putting DOT and other similar technology in a separate category, e.g. a class of "utility tokens." This approach has been taken in numerous other jurisdictions.

Regulatory Barriers

The United States is facing two primary obstacles to fully unleashing the power and innovation of blockchain and Web3 technology. The first is the lack of a comprehensive legislative framework for digital assets and blockchain technology. The second is an attempt by some to apply laws and regulations not specifically designed for blockchain technology and the digital asset space.

Regarding the first, we applaud the subcommittees for undertaking the hard work and deliberation necessary to develop a balanced, appropriate, and responsible legislative and regulatory framework to address this emerging innovation. We would ask that as you develop policy you do so with the understanding and approach that recognizes new technologies. To simply apply existing regulation would be inadequate and inappropriate to truly address this emerging industry and technology.

Many jurisdictions around the world are moving forward and establishing regulatory systems specifically designed to address digital assets and blockchain technology. In Switzerland, the Swiss Financial Market Supervisory Authority (FINMA) has implemented guidance which brought clarity to the industry. The Distributed Ledger Technologies (DLT) Act subsequently issued by the Swiss legislature provides a clear framework distinguishing between "payment tokens", "security tokens," and "utility tokens". In a no-action letter dated November 14, 2019, FINMA classified DOT as a utility token. In addition, the European Union has developed the Market in Crypto-Assets (MiCA) Regulation that includes its own class of utility tokens as well. Now is the time for the United States to move forward with a comprehensive regulatory framework for digital assets and blockchain regulation.

The most important regulatory concern for W3F is the classification of digital tokens. Under the current U.S. regulatory approach, almost all tokens are viewed as financial assets. A token is either a payment instrument, a commodity, or a security. However, this certainly is not the case for all tokens, and all tokens should not be treated as such. As a simple example, the chair I am sitting in could be tokenized, but it would not fit into those classifications. Not all tokens will fit the defined classifications that exist, and there will be some tokens that will have the characteristics of a particular asset class and at a time in the future will cease to have those characteristics. This is part of the nature and innovation of the blockchain technology industry.

A token can be used initially as a fundraising instrument. If a token is used for fundraising purposes, it should be subject to all applicable laws and regulations. However, that same token may serve a functional purpose devoid of speculative investment. This does not mean the token will have no value, but the primary purpose of the token will be to serve a functional purpose not to produce profit. For example, tickets are sold to attend events. The purpose of the ticket is to receive admission to the event. This is the only purpose of the ticket. It is not intended to serve

as currency or a store of value. However, an individual can purchase a ticket to an event without the intention of attending the event. Their intent may be to resell the ticket to create profit, but this does not change the purpose or functionality of the ticket.

We are not suggesting that the existence of different uses for a given token means that such a token should not be regulated. Additionally, while a token may initially serve one purpose which should be regulated under a particular classification, and later lose the characteristics of that classification, an organization, company, or entity should not be allowed to simply declare a change of classification without carrying out the necessary steps to ensure a token no longer possesses the characteristics of its initial classification.

In the case of DOT, the Web3 Foundation sold this token as a security in compliance with U.S. federal securities laws. Before the network launch, the Foundation had not yet delivered any digital assets to initial purchasers. While the Polkadot vision had not contemplated that the blockchain's native token would be a security, the Foundation understood that the SEC's view was likely to be that the to-be-delivered token would be a security, at least at the time of delivery. However, the ultimate purpose of Polkadot's native token was to serve as functional infrastructure for the network. DOT was not designed to be a speculative investment vehicle, it was designed to secure the network, support governance, and obtain parachain slots.

For over three years, the Foundation met regularly with the FinHub staff. In doing so, the Foundation adopted an approach to compliance that was similar to its approach to technical development: head down and dedicated, while setting the bar high. Since the outset, the Foundation attempted to break new ground in its interactions with the SEC, complying with U.S. federal securities laws, including with respect to the offer, sale, marketing, and delivery to initial purchasers of tokens as securities, and in its treatment of retail purchasers, generally in line with the way public companies are expected to treat retail purchasers.

The SEC welcomed meetings with the Foundation, and there has been a spirit of open communication and dialogue. Those interactions have given the Foundation a deeper understanding of some of the SEC's concerns and have helped to develop solutions to address them. Following this journey the Foundation is confident that DOT is no longer a security. However, even after putting in all the efforts to ensure compliance, the Foundation was left without any tangible validation in its hands. Also, the mere fact that the "process" lasted three years in itself demonstrates that the current approach to regulation is flawed. Three years in tech are an eternity.

Clearly, a process with the proper legislative authority to reevaluate a token for reclassification with external effect is necessary. The SEC has already outlined a process to evaluate the status of a digital asset. As mentioned previously, SEC staff in FinHub outlined the components for reevaluation in the "Framework for 'Investment Contract' Analysis of Digital Assets." In this analysis SEC staff presents a thorough interpretation of how a digital asset should be evaluated regarding its status as a security. The Foundation suggests that Congress establish a procedure through legislation to authorize regulators to reevaluate the status of tokens.

Over the years, the Foundation developed what it believes is a workable theory of how token reclassification may be achieved for an increasingly decentralized project, like Polkadot, and a digital asset that, other than having been offered and sold initially for fundraising purposes, does not itself bear any security-like characteristics.

It has been one and half years since the completion of the Polkadot launch process, which includes a truly decentralized governance mechanism and on-chain treasury. Consistent with the views that we have shared with the SEC staff, in the Foundation's view, current day offers and sales of DOT are not securities transactions, and DOT is not a security, it is merely a piece of network infrastructure. We look forward to helping the committees develop a comprehensive legislative framework for all token classifications in the U.S. and are confident that with clear laws, the U.S. will continue to lead the world in innovation.

In Conclusion

Web3 technology and the Polkadot Network offer unimaginable benefits to the United States and the world. This technology can give control of data back to users. It can bring efficiencies not only to financial services but also trade, property ownership, social media, and virtually every other facet of the global economy and daily life. This technology will be the next generation of the internet and how individuals interact online. However, without a sound regulatory framework tailored to the technology, the United States may not see the full benefits, and lose a leadership position in the development of blockchain technology.

At its infancy, the incredible benefits of the internet were unimaginable. When the first individual went to the moon no one knew the innovation it would unlock. Blockchain technology is the new frontier, and it is time to harness, nurture, and provide oversight and consumer protection to realize the life changing benefits waiting for this country and the world.

Appendix I

Examples of Polkadot Network Use Cases

As described above, Web3 is a new way of utilizing the internet that aims to improve upon existing Web 2.0 technologies. By using decentralized networks, Web3 projects offer increased security, privacy, and transparency and solve many of the issues the Web 2.0 era has created. Below are examples of Web3 use cases and projects currently built within the Polkadot ecosystem:

Social Media

Frequency offers a social media optimized infrastructure giving users full control over their data. It facilitates a secure, open source, universally accessible social graph that offers a means to democratize and decentralize social media. It will allow users to switch between social media platforms at will while maintaining full control over their data and their social connections, so they don't lose their social graph when moving to a new network. The public social graph is independent of private company database servers and there are no financial incentives offered through crypto tokens, making this project distinct from typical blockchain-based social networking projects.

MeWe is a social media app with 20 millions users that is building on Frequency. The integration will give users back control over their data. The app is the next generation in online communications, envisioning a social and chat app that would give people everywhere the most exciting and helpful sharing technology with privacy built into the design - where members would feel safe and respected. Users will be able to share their data across social media apps and have control of what data appears on specific social media apps.

Business and Supply Chains

OriginTrail - Knowledge graphs are database structures that form a fundamental component of the internet as we know it today, representing the relationships that exist between data, real-world entities, events, and concepts, and powering some of the most highly adopted services, from Google Search to Wikipedia. But the centralization of today's knowledge graphs brings several shortcomings, including siloed data, a lack of transparency, and the inability for data owners to have sovereignty over their data.

OriginTrail is the world's first Decentralized Knowledge Graph (DKG), addressing many of these issues and bringing knowledge graph technology into the age of Web3.

The platform provides a shared infrastructure based on blockchain technology that enables seamless data exchange between businesses and customers, which can lead to better decision-making and improved efficiency in the supply chain. Anything from supply chain data, consumer goods or digital collectibles can be evolved into discoverable and verifiable Web3 assets, driving transparency and trust in the global economy. Already, over 40% of US imports are enabled with OriginTrail technology to foster secure exchange of security audits, with companies using the platform accounting for $1.5 trillion in purchasing power.

Gaming

Mythical Games -The Mythical Platform is a full-service system for developers and publishers to build or integrate blockchain-based play-to-earn economies into their games, increasing engagement and unlocking new business and game models by making blockchain accessible and allowing players to become stakeholders in their favorite games. The Mythical Platform is the underlying technology of a peer-to-peer marketplace, and manages trades, payments, users and blockchain inventory. The marketplace unlocks the value of a player's monetary and time-based efforts, or the rarity of their collection, by making it possible for buyers and sellers to transact confidently in a secure and trusted environment.

The Mythical Platform includes built-in regulatory KYC/AML compliance and indemnity. The simple-to-use verified wallet ensures easy pay-in and payout of both fiat and crypto currencies, with Mythical acting as merchant of record.

Mythical offers features including authentication, inventory management, live events, player data storage & identity, account admin tools, insights/analytics, self-service tooling and more that integrate directly with the Mythical Platform and help partners bring their play-to-earn games and NFTs to market faster and more efficiently.

Privacy, Intellectual Property

KILT is a self-sovereign identity platform that allows users to safely prove identity and credentials while giving away only the information that they want to share, without centralized data silos. In Web 2.0, organizations accumulated silos of user identifications creating monopolies, based on massive amounts of centralized data. These databases are a honeypot for attackers and place users in a more precarious and less sovereign position than in the non-digital world. KILT provides individuals with control over their own data and identity, while also providing a secure and efficient way for businesses and organizations to verify identity and credentials. This can help to reduce the risk of identity theft and fraud, as well as improve security and privacy.

InvArch is a platform that brings intellectual property protection to the blockchain. The protocol utilizes blockchain technology to allow individuals to tokenize and store their intellectual property (IP) as intellectual property files (IPFs) and utilize programmable IP Tokens pegged to an IP. Moreover, this technology will provide a mechanism for instantly validating content and flagging duplicated files. This protocol will serve as a foundation for a new global economy of decentralized ownership and management that will help streamline innovation and opportunity.

Internet of Things (IoT)

Robonomics is a platform for controlling Internet of Things (IoT) and real-world devices through their blockchain. Communication between the user and device happens using the most successful technologies from the Web3 world – IPFS, Ethereum, and Polkadot. Thus, developers can create modern and secure applications for Smart Cities and Industry 4.0. Robonomics enables individuals and businesses to securely and efficiently control and manage their devices and systems, while also providing a transparent and decentralized platform for IoT management.

Nodle is a decentralized network for IoT that incentivizes users for turning their smartphones into nodes that secure the network and provide connectivity for devices around them in a decentralized wireless network (DeWi). In this way, smart devices without an Internet connection can communicate without the need for additional infrastructure. The current infrastructure of IoT

systems is slow, insecure, and centralized, it struggles to scale in a secure and transparent way. Blockchain and decentralization remove third-party risk, upgrade security with tamper-proof technologies, and automate complex data processing and transactions. This is why Nodle has been adopted in 100+ countries on over a million devices and has already processed millions of transactions.

Art

Beatport.io is a digital collectible marketplace bringing electronic music culture to Web3.
This platform will enable record labels and artists to create and sell unique digital assets while generating greater fan engagement. It allows artists, producers, and record labels to enjoy the benefits of Web3, while also giving music fans an opportunity to explore the value of digital collectibles and deepen their connection to their favorite artists and DJs.

These digital collectibles can also become fan engagement tools for artists and labels by providing early access to bonus features such as unreleased tracks, discounted tickets, and access to global events and interactive experiences. This gives fans and artists a variety of new content streams, creating new communities while the artists reap the majority of the return.

Sustainability

BitGreen is creating a community-driven carbon credit marketplace and impact investing platform that enables users to invest directly in critical sustainability initiatives. The platform encompasses a suite of decentralized applications and impact investment options across carbon credits, green project financing, green bonds, and more. In many cases green projects are unable to effectively fund their operations. BitGreen is a platform designed to improve current carbon-neutral innovations such as Carbon Credits and deliver high-quality green finance innovations. Currently, green financing has a multi-trillion-dollar funding gap that is the result of multiple pain points, notably restricted investment opportunities, project discoverability, and a lack of liquid exchange markets. BitGreen addresses this issue with a decentralized system, community-led marketplace, green projects, as well as transparency across investing, tracking, and auditing carbon credit and impact investment opportunities. BitGreen has partnered with various organizations to support environmental causes and encourage sustainable practices.