

diffusetap
Virtual Event Series

The Green Blockchain

Guest Speaker:



Jerod Moore
Founder
Digital Spaceport

Hosts:



Kenny Estes
CEO & Founder
Diffuse



Ayla Kremb
COO & Co-Founder
Diffuse



DiffuseTap: The Green Blockchain

Last time on DiffuseTap, Jerod Moore, Founder of Digital Spaceport, talked to us about green blockchain technology and how it's evolving as the demand for sustainability in crypto grows, how it compares to Bitcoin and Ethereum in terms of power consumption, and what impact it might potentially have on the industry.

Want to make friends from the Diffuse Fund Ecosystem? Email contact@diffusefunds.com.

DiffuseTap

This networking session is part of our weekly virtual events series. Networking (you'll bump into at least a dozen high caliber fund managers) meets purposeful (you'll tap into brand-new sources of ideas)... straight from your armchair like a boss.

Meet the Speaker



JEROD MOORE is the founder of Digital Spaceport, an educational YouTube channel where he talks about cryptocurrency mining, market movements, industry news, and all things blockchain technology. Jerod is also a Consultant for Texas A&M University, where he facilitates educational platforms for the College of Science.

LinkedIn: [@jerodmoore](#)

About Diffuse®

We are an alternative fund platform offering differentiated investment products. From digital assets to VC funds and beyond, we identify green field investment opportunities we feel will have market beating returns and turn them into professionally managed funds. For more information, visit www.diffusefunds.com.



KENNY: You're here today to hear from this good man, Mr. Jerod Moore. Jerod, can you please tell people a little bit back low or about your background and what you're up to now?

JEROD MOORE: Hi, everybody. I'm Jerod Moore, also known as Digital Spaceport on YouTube. I do a lot of coverage on blockchains. I have been a long term cryptocurrency miner, and I'm just fascinated by the technology. We're seeing some emergence and trends in it in this cycle in particular that I think are really important to pay attention to, as mainstream adoption appears to be moving forward.

Some of those things are going to be powering the next wave, which I think at this point we're all thinking about and what happens next. Professionally, I work at Texas A&M University and I do web development for a lot of different platforms for the College of Science.

AYLA KREMB: Awesome. I will dive directly into the questions. You spend a lot of time thinking about, talking to, and working with green blockchain projects and companies. What is green blockchain? What does that ecosystem mean? What is innovative about it and how does it work?

JEROD: As a concept, it started out not that recently, but we are seeing the formation of blocks on a chain with lower energy usage. The traditional proof of work that we see with things like Bitcoin is an energy-intensive process. Growing the security of the chain and propagating it takes a tremendous amount of electricity.

And so, when we say green blockchain technologies, we're talking about technologies that are geared towards lowering that particular impact. We're now seeing the federal government, international organizations, and certainly environmentally conscious individuals and investors paying close attention to this new class of cryptocurrencies that are low power and low wattage. Some of them actually have really good fundamental underlying technologies. Some with new Nakamoto consensus, like Chia.

And we also see some other adjacent technologies in the proof of stake space that are also low energy usage. We're seeing these propagate as a response to the demand. This is not new in this cycle. The attention and the demand for a lower wattage blockchain has been there since the past two waves, and it's something that's just occurred. This time we're seeing some actual really good deliverables and some really good blockchains come out of it.

KENNY: Okay, so Bitcoin is proof of work and Ethereum is not, or at least mostly not at this point. It's proof of stake. Do you see proof of work as a thing of the past? Is it on the way out, and is it all going to be more computationally efficient going forward? What are the other types of projects aside from Ethereum that are having a massive impact from an energy consumption basis? And what other major steps do you think we've taken in the last year?



JEROD: There are a lot of different technologies out there. If we were to ask whether it's a thing of the past, I don't think proof of work is going to be going away or by the wayside. However, I think there will be increased regulation. You already see some of that being called for from the White House, and some of the directives as far as some of the papers that they're looking at. There is increased scrutiny coming from a U.S. regulatory standpoint on this.

In New York, the [EPA](#) decided to get involved recently. They're limiting the emission standards for people that will be supplying electricity and putting a moratorium on proof of work mining for the next two years as a review cycle. These things could happen at local levels all the way up to federal. [CARF](#) is also possibly coming down the pipeline as an international framework for crypto reporting. It calls for the monitoring and possible actions that we'll see. One of the other important sides of the coin is that there has been a call to action for blockchain to actually help solve some of the climate processes that we see that are multinational.

By having a [trustless blockchain](#) that is truly auditable, and a distributed ledger technology that all parties can get on board with, we also see a capability set for moving forward and advancing things like [carbonization](#) and trading of carbon technologies. We see quite a few players. Like I mentioned, I think Chia is one that I talk about quite frequently on my channel. I'm definitely a Chia maxi, because I think it is a great [layer 1 blockchain](#) with a huge distribution and a great set of people that are currently producing the blocks. It provides a lot of powerful things as a result of that.

If you look at some of the other players in the system, [ChainLink](#) is huge right now. They are providing a lot of data services and background services on the accessibility for smart contracts out there. We see a lot of other upstarts like Nano that are focused on that, as far as technology. Again, most of them are also going to be proof of stake. The only one that is not proof of stake is Chia, which is [proof of space and time](#).

AYLA: Got it. What are the kind of folks who are coming into this space? Are they startups? Are they big tech giants who want to grab some market share here? Who is trying to play in this field and who is making progress? Who got crushed by FTX and who is no longer with us?

JEROD: Who got crushed by FTX is an ongoing story that will just have to continue. I think there's a lot more that's going to come from now on. Some of the people that are playing in the ecosystem, though, are the [World Bank Climate Warehouse](#) and [Climate Action Data Trust](#). They're big multinational institutions. This is the framework for intergovernmental trading of carbon credits, and you see ChainLink working together with them in tandem on these different technologies.

If you look at the smaller players in this, they're going to have more of a grassroots feel to them. You've got companies like [Cultivo](#) who are offering portfolios for investors of land. If you have a mangrove forest somewhere, you can actually register that and be earning tokenized credits off of that, which would be tradable. One of the biggest challenges in the space is the trust of the quality of a tokenized carbon asset or a different asset out there. Being able to validate those is becoming increasingly important.



Also, being able to say these have not been actually tampered with or double counted is also important. Underlying technologies that we have not seen in blockchain before include things like [DataLayer](#), which is a forward looking, side chain database. It's used for Climate Warehouse and is being powered by Chia. It's also being accessed by ChainLink. You can see the interplay of a lot of these partners out there.

Moving forward with the technology set, I think you will see a lot of grassroots refi. [Regenerative finance](#) and the impacts that you can have with that is not a new concept. I think there are also a lot of top down players looking at ESG bridges and the capability sets of purchasing those for large corporations which have to meet different compliances. They have scope levels that they have to hit to make sure they're carbon neutral in the production of whatever it is they produce.

KENNY: Awesome. We got two questions in the chat. But first, we have to define some of those words. What is refi? And secondly, what is EVM compatible and what is the actual core value prop there? This seems to be a question about Chia specifically.

JEROD: Refi stands for regenerative finance. It's a new take on an old topic, which is impact investing. That has been around for a long time. If you're looking at how you can impact and grow possibly with being rewarded at the same time, and making social change, or taking climate active actions that are environmentally sustainable and also be rewarded for it, there's a lot of regenerative finance.

This is a very grassroots approach. You don't typically see this coming from the top down. This is used by some of the more grassroots companies. If you're looking for a potential entrant or seed or something like that, that would be interesting. There are a lot of great companies out there that are in the refi zone.

The next thing I believe you asked about is Chia. [Chia](#) is an L-1 Blockchain. There are over 120,000 [full nodes](#) on any given day. The geographic distribution is incredibly rich, which is huge in blockchain technologies because of the formation of the actual block. If you have been paying attention, the SEC claims that it has insight and capabilities of regulation on certain things based on the location of the actual data centers that are hosting the majority of the block formation for things such as Ethereum.

That becomes problematic. But you don't have that problem with Chia because of that massive distribution. Less than 25% of Chia's full nodes are located in the United States. That is an important part of being truly decentralized and truly peer-to-peer.

I really enjoy the people that are behind Chia as well, which includes [Bram Cohen](#), inventor of BitTorrent. BitTorrent changed the world and changed industries, of course. And then we also have [Gene Hoffman](#). Both of these people have multiple successful businesses that they've started, and they have different goal sets. This is not your traditional blockchain company.

That is a refreshing take on what we see from a lot of blockchain companies, which like, when rug exit, some of them become manifested in the actual rug, like [FTX](#). Some of them out there are probably also going to be manifesting very shortly as a result of what just happened with FTX.



KENNY: Okay. I'm going to ask another question from the chat here. First, we're going to do another definition. You said proof of space and time. This is a new term for me. What in the world does that mean? And then, the question from the chat is, is it actually significantly more or less energy intensive than just simple proof of stake?

JEROD: Yeah. I'll start with the last one first. [Messari](#) just put out a good report on Chia. They looked at the impact and the energy usage of the chain, and it actually uses about the same as [Solana](#). If you're familiar with the Solana network, when you look at the difference between Bitcoin and Solana, you're looking at a massive difference. You're looking at a large company's footprint for wattage usage, as opposed to Solana, which is very centralized. How many times has Solana stopped in the past year or two? Quite a few.

But when you look at proof of space and time, this is a new concept. This is a new L-1 technology. It is a Nakamoto consensus. It is a coin set model. It is very much like Bitcoin, and it was actually created with most of the problems of Bitcoin having been known. Instead of using intensive [ASICs](#) and doing [Sha256](#), you actually use off-the-shelf computer parts, which include hard drives for the storing of the proof of space, which is the plot. Those have a tremendous lifespan.

And if you look at the energy impacts that we have from hard drives, it is about 5.6 watts. If you look at the impacts from a leading edge ASIC, you're looking at about 3,250 Watts. There are a couple of zeros that you add on when you're dealing with Bitcoin versus when you're dealing with something like Chia, which is significantly lower wattage.

AYLA: A follow on question there from the chat. Can you dig into ESG tokens and how they work? What are they?

JEROD: I would say if you're interested in this, take a look at [Toucan](#). I would say this is one of the best places to go. Check out [Toucan](#), scroll down, and go through the portfolio. You will spot some of the people that are actually linked in there. I'm not naming names, but I will say that when you see retirements that are from four or five years ago, there are problems with the ecosystem. Companies are double counting expired credits, and there are defunct companies that are still being propped up. That's why I think it's pretty important to have a top down approach to some of this.

There is a lot of risk in the space of green blockchain from the grassroots. It's not like you can't just jump in and do due diligence. Of course you can do that. But there is some sort of impetus there, in my opinion, which is another reason why I don't think the world government organizations that are dealing with carbon tokenization are going to be making decisions without having done that due diligence.

That's another reason that I think there's a large impetus for Chia, which was highlighted at [COP 27](#). Singapore is also going to be housing the Climate Warehouse, and they're essentially Red Hat model-contracting with Chia as the provider of blockchain infrastructure underlying that, for the carbon



data interchange. There's a lot of ESG out there. As far as the interchange and the ability to buy, that can happen all the way down at a small level. That can be a voluntary market.

There are different partners out there. The Carbon Action Fund I think is the most interesting. It could be coming through certain types of banks. I think we'll see that in the future as an emergent trend, with people like Aspiration that are offering the ability for people not only to have a refi impact, but also to bring in a bridge for larger corporations looking to retire bulks of certified good carbon credits that can be validated and retired effectively.

KENNY: That's great. Let's pick up right from what you mentioned there. You said that in grassroots in particular, there's a lot of issues. As investors, what are the red flags? What do people need to look out for when they're doing the due diligence? What are the most important variables in your opinion?

JEROD: I would look for players that are just new entrants, who do not have any interplay with other players. That is one of the biggest signs that you want to look out for. The smell test is probably the best thing just because there are so many that will not pass the smell test. Probably 25%. I would say that is your first and then low strength cryptography.

Also, if you see things that are based on clones of existing chains, those should certainly raise alarms. If you see an ERC 20 bridge that is going to be easy to have a contract on, you would want to make sure that that contract has been audited many times. That is, if you're looking at some of the new entrants that have never actually worked at a large scale. I think that's another thing.

And yes, everyone has to start somewhere. But unless you're doing a completely holistic grassroots organization and bringing it up from the bottom, it's going to be hard without working with a larger player to understand, to comply, and to make an actual impact that will be long term, and that will be recognized. That's because we now have a centralization as far as the recognition of whether something is quality. That will be coming down the pipeline and will impact a lot of the smaller players over the next couple of years.

AYLA: It's interesting because we were thinking about this concept of the need for a bigger company to be around in order for these smaller businesses to survive. If you were going to look at it from a funding perspective, how much does a project need in this space to get off the ground?

JEROD: One of the best things that a person starting up could do is to actually talk to an investor instead of a cryptocurrency mining YouTuber. I would say that my capability to answer that question is not there, and I would like to stay in my own lane. I'm not an investor in companies.



Thank you for downloading this DiffuseTap event transcript.

[Sign up for upcoming sessions](#) and check out [past features and event transcripts](#).



Dennis Chookaszian
Corporate Director, CME Group

DiffuseTap: Institutional Grade
Governance

Sharing his decades-long expertise on corporate governance, Dennis talked about how to avoid a co-partnership going sour, the problem with overly idealistic CEOs, and the importance of keeping your board in check. [Read on](#)



Susan Brazer
CEO & Founder, LionShare Media

DiffuseTap: Media Metaverse
2022

Susan described the 2020 digital media landscape; the evolution of media distribution; how converging, emerging technology points to the metaverse; and the prospect of having an open, decentralized, and free Web 3.0 marketplace. [Read on](#)



Raj Mukherjee J.D.
VP/Global Head of Tax, Binance.US

DiffuseTap: Crypto Taxes
Decoded with Binance.US

Raj explained the complexities of the US crypto tax landscape, how he built a dynamic tax information system for [Coinbase](#) and [Binance](#) from scratch, and how investors can profit from crypto without getting caught in a taxation mess. [Read on](#)

JOIN US