TFTC 415

**Marty:** [00:00:00] That Steve, we will not be hitting bongs. You have a big debate tonight. Yeah. We'll wait till after. Hold that closer to you. Oh my bad. The, uh, ordinals.

**Steve:** Okay. Do you have any I got one. Yeah. I'm a You have your Greta Ordinal. Yeah. My Greta Ordinal. Um, she's harvesting coal. She's harvesting coal. She's got a bowl of coal in her hand.

She's woken up and learned to coal. Uh, Greta Greta Thunberg. Um, yeah, it's an ordinal. Uh, when that scene sort of wired onto the stage in January, I got, um, a buddy to inscribe her. Is

**Marty:** are you like one of the first 100,000 inscriptions? I'm number

**Steve:** four. 64.

**Marty:** Oh, shit. You're early. Yeah. And you got a p drum inscription.

What's that? 4 64

**Steve:** p and drum. Oh, fuck. Yeah. So I mean, I'm planning on dumping that at the top. So I'm just [00:01:00] waiting to wreck somebody. Well, apparently

**Marty:** they just broke the whole ordinal theory. Yeah,

**Steve:** I heard. Yeah, I heard. Yeah. Yeah. I've been pulled into these, uh, I'm in a few ordinal like chat groups. Um, I'm, I'm not even like against them.

I just like, they're just bitcoin transaction data, so if people want to do it, do it. Uh, I, I'm, I made sure to inscribe that Greta in high res as a troll, um, primarily a troll to Greta

**Marty:** or just

**Steve:** to the more, to the Bitcoin court of devs, uh, frankly. Um, cuz you know, some of them weren't liking it at the time.

Like, well, you guys are the ones coding this and this is free, free market. And I don't really, I I've always been a little critical.

**Marty:** Yeah. You're, you're stop funding devs guys.

**Steve:** Yeah, I wouldn't say I'm, I wouldn't say big into stop funding them. I think that there needs to be a little more concern on. Um, just general, general concern and paranoia around, [00:02:00] around, uh, the Bitcoin dev process cuz you know, I mean, if they're gonna react, uh, a lot of 'em say at the time, like, when the s thing came out and people were spamming the, you know, quote unquote spamming the blockchain.

I mean, this is just valid behavior. So why are you upset? And if you're gonna act that way and be upset about it, uh, I feel like you're not quite understanding what it is you're building.

**Marty:** Yeah. That was another valid thing that was brought up. Like, could you, did you not foresee this being a possibility?

And if so, what does that mean about Yeah. Everything going on in the development process more

**Steve:** broadly? I would say so. Yeah. Yeah. So I don't know. I mean, I'm, I'm, I'm not like, uh, I have advocated like, you know, uh, at least beware of funding devs cuz uh, I got a lot of shit from a lot of devs when I was saying this a few months ago cuz um, while I was, I was basically pointing out though, like if you're, cuz people were talking about waba, like, There was something going on.

I can't remember who it was, I won't name names. Like some people were losing funding, like, [00:03:00] just cause the market's bad, right? Yeah. We're all, we're all struggling, like all Bitcoiners are in a worse place than they were. And, uh, yeah, so like there's some dev jobs roles that were not getting refunded and, and some of these people are really good people that do good work.

Um, but I was just pointing out like, you know, being the asshole that I am, I'm like, you know, first of all, I feel for you, I've had to lay a bunch of people off. Uh, our business isn't, you know, doing as well as we were. Uh, there's all kinds of pain. We're all feeling, you know, like being paid to develop Bitcoin is a conflict of interest.

Like, in my opinion, why, uh, because your interest isn't towards, well, your interest is towards your employer. So it's, I won't say it is explicitly a conflict of interest, but it's a potentially a conflict of interest. And, uh, if you're being paid to develop bitcoin, And sure. A lot of these guys, they get paid.

It's like, you know, um, they have free reign on what they contribute to, but at [00:04:00] the end of the day, um, no one bites the hand that feeds them. And, uh, if there's, um, it's just, it's, it's not so much like, I don't think there's like explicitly individuals like trying to attack Bitcoin through development. But I think that, uh, when you get paid to do it, and it's, it's a different incentive model than if you're doing something, uh, only only looking to make things like more efficient.

You, there's like a, uh, you're sort of mo you're partially motivated to like, execute and do things and like things that might not actually be making Bitcoin better, uh, from a cause a lot. One thing I don't like about when at least. In socials. I'm, you know, I'm not, you certainly can't speak for what all devs are like, but, uh, there seems to be a lot of blissful ignorance, like about what, who the enemies are and what they're willing to do to us.

And, uh, I see, I feel like sometimes there's a lot of, there's a lot of naive, um, [00:05:00] just naive. Yeah. Yeah. Just sort of like, so I, it's not so much like, I don't want anyone getting funded. I, I think that's fine. Um, but I do think it's worth pointing out that it can introduce conflicts of interest and also, um, uh, you know, it's just better to act with paranoia on the matter.

Yeah. Especially with Bitcoin. And it's, yeah. And so some people take it like, you know, they get insulted by it, um, by like, you know, you criticize that like, like you're a paid dev. You're, you have a bias, like that's just. I, I've already worked now with, uh, in my current company and in the past companies, um, when there is like any kind of conflict, like, you know, you might have a side gig or whatever, um, it does, even when it gets disclosed, like, which is obviously really important, like to the employer, that we all know what the conflict is, but it still creates friction.

And I, I've seen it a number of times now in my own business, in my own past employer, uh, like for myself, for example, when I was [00:06:00] starting upstream and I worked for someone else like it. Um, it can be, uh, interesting to navigate and the conflict exists and it can, uh, push, um, yeah, push things in a different direction.

Yeah. What the, what maybe the market needs. Yeah. I

**Marty:** could say it. And to be clear, I think the devs are extremely important. They're doing good work. But I do agree with you, we should be as paranoid as possible. Cause the stakes are really high. We fucked up Bitcoin. Mm-hmm. It's not gonna be good.

**Steve:** Yeah, I don't, and I don't even think the devs have the power to like, fuck up Bitcoin.

Like, uh, like literally like ruin it. I don't think they have that power. Uh, I think most people would agree with me. Like they can, they can, uh, push for changes and, you know, it might get committed, but you still get to choose a code run, right? So it's like it's, it does go back to the users have power, but what they can do is lead the market astray.

Um, a lot of, uh, companies and call it, you know, the market nodes, like the economic nodes, [00:07:00] like just sort of follow, uh, the bitcoin core dev consensus, which is good and bad. Um, but what can happen is there, there can be like an economic split. Like there can just be, um, uh, they can keep pushing down a path and, you know, um, I've, I've always said like even when people were like attacking Bitcoin maxi, like this divisive rhetoric is bad for Bitcoin, uh, you can, you know, you blame the toxic maxi at the time.

You know? Um, what is a

**Marty:** toxic maxi? Am I a toxic

**Steve:** maxi? I think you would be defined as a toxic maxi. What? Yeah. I I probably would too, actually. Yeah, I think so. I've been blocked by so many people that are always talking about toxic Maxs. So, but I, I was always, you know, back, it was like a year ago whenever, like, it was always on, like everyone, you know, a bunch of nerds or like, you know, whining about toxic maximalism and how it's bad for Bitcoin, but the very behavior they're doing is bad for Bitcoin.

It's divisive and, uh, [00:08:00] it's a bit of projection. Yeah. Yeah. And I mean, it's the opposite of a, like, it's like divided. We're the Bitcoin community's weak, um, Obviously chain splitting weakens us significantly. Uh, and if, if like devs get enough influence, if there's enough, you know, say conflicts of interest.

I mean, you see it in academia all the time. Like, these brilliant people have a career in academia, and by the end of it, they're just like, uh, like, like they cannot deal with, uh, new information, um, turning the table, like, you know, like turning the table on their, their work, their life's work. And they just, they get into this, you know, I'm just like, I don't know, like Krugman, you know, they mm-hmm.

In the Bitcoin world, they, the bikinian economic economists, like, they can't understand Bitcoin and they won't, they won't accept that their reality might actually be wrong and they just keep doubling down. And I think that same social, it's a social thing, right? It's like a social, um, pressure. [00:09:00] It's a social, like, uh, it's, it's a human thing.

And I think like, There's no dev, there's no one working on Bitcoin core that's immune to it. And uh, the more momentum it gains where, you know, the, say Bitcoin core, um, contributors, like sort of the social side of things, like that's where there's social issues that can happen. But again, it can't really ruin Bitcoin in any way.

It can, but it can sort of temporarily make it weaker and less valuable to the, to the men and women like around the world that use it. So yeah,

**Marty:** like the crewman analog is like the U Eric Walls, Nick Carters and Bitcoin and they just get butt hurt because people don't view this thing the same way they do and just say, Hey, I think what you're doing stupid.

Like, I'm not gonna try and validate it just cuz you want me to.

**Steve:** Yeah. I mean, those guys are all hypocrites from what I've seen. Uh, like, but yeah, they're, they're part of like, you know, they're like, uh, I mean, I don't, I don't think, I mean, yeah, like there's, we don't have to talk [00:10:00] about personally, but it's, yeah, there's just, there's just a lot of, uh, people I think are just ignore that like, cause you know, there, there does seem to be more of a, I don't know if you want to say like, uh, coordinated, but like there's, there's more tougher things sort of irre regulatory wise, like coming out, uh, especially on like financial services side of Bitcoin.

And of course the all coins, like the shit coins. Uh, but um, you know, we're gonna see more tougher mining regs, right? Yeah. Like, we're sort of already seeing all that stuff sort of happen and it's all gonna happen. It's like nothing's gonna stop it anyway, but like, while it, when it's happening, like people.

A lot of people, I think are just ignorant to the fact that they think, like, you know, these things, they can stop it. Like, like, which they can't really, and, and, and then they, uh, you might be able to delay it, I guess, but you know, like the divisive bread is sort of just terrible. Like if, uh, [00:11:00] and no matter how that might, you know, come out, like it could be the toxic maxi is being divisive, or it could be the people attacking toxic factions.

Yeah. I mean, it's just like Bitcoin is, is, uh, gains its power through its network effect and people syncing together, right? Yeah. Synchronize synchronization. So divisive rhetoric from any, in any way is, uh, is a negative on the, on the network, right? So Yeah. And the value of the network.

**Marty:** Yeah, completely agree.

That's why I tried to like, stay away from those fights, like the toxic maxi stuff. I used to push back and I'm like, I

**Steve:** just don't care. Yeah. I've sort of, after a while I, I got pissed me off cuz it's like, man, like what are you talking about? And a lot of it was just nonsense and hypocritical. Um, but yeah, it just gets old.

Um, and I mean all this stuff's gonna happen no matter what. Yeah. Like it's just human, human beings being human, but you know, there is a bigger bitcoin's sort of like going into this, uh, [00:12:00] uh, I, I like using, um, that the phrase like, it's out of, its sort of like infancy. Like it's, it's out of its honeymoon period where everything is good.

It's technically a teenager now. Yeah. Yeah. It is a teenager and now it's like, it's really only starting to shake the fabric of, uh, fiat society. Uh, like it's starting to, you know, reverberate like to, um, you know, like it, like Bitcoin keeps going up in value. It's seriously gonna. Cause major problems in the, in the financial system, the more people that decide to just park some money in Bitcoin for a while, as it as that, and that effect is continuing to grow.

It's just gonna compound things and it's gonna incite, you know, it's gonna inflame the regulators and the Fiat maxis, the antibi Bitcoiners to like hurry up and, uh, beat up on Bitcoin and censor people that use it and make examples of people. Yeah. Um, and I think we are seeing the [00:13:00] signs of that now. And so I think we're going into this phase of Bitcoin becoming more mature and being what it is, like what it really is, which is it's a tool that, uh, you know, it's, it's sort of like, uh, it's a tool to escape, uh, fiat slavery, right?

Like, uh, yeah. Um, and in the eyes of the law, uh, that's can be, could be against the law, like, you know, Uh, off the table trade, like not trading through the banking system. Yeah. We're all gonna be terrorists soon. Yeah. Yeah. It could be.

**Marty:** Seriously. Yeah, no, this is something I've been writing and talking about like the, seems like that then they fight you stages upon us, whether it be Elizabeth Warren and her bullshit about the environment.

And now it's becoming clear that Russia is probably mining Bitcoin. I dunno if you've heard this, but I tweeted out yesterday, a bunch of people were like source, source, source. But it was like the manufacturers, at least [00:14:00] one of them, I won't name which one Yeah. Has more sales volume in Russia. US right now with their Asics and the source is brokers.

If you're in the mining industry, you talk to a lot of brokers, you get pricing on asics and you talk to 'em, say, Hey, what are you seeing out there? Yeah. Some of these brokers have loose lips and they're like, yeah, we're selling a lot more product in, in Russia right now than the us.

**Steve:** Yeah. Um, and that rumor's been going around for a while too.

Um.

**Marty:** If you look at the hash rate growth over the last three months, it would make some sense.

**Steve:** Yeah. Yeah. And I mean, it, I, I remember, I, I, I got, uh, a lot of comments on that tweet I made when they, when the Nords streaming pipeline went down. Like, got blown up apparently by the US government, I guess, like, you know, um, it's funny cuz I don't think that, I don't know, like, I haven't looked into it.

It sounds like that's, that was made a fact by that, uh, journalist or whatever. Yeah. Uh, what's his name? Seymour Hirsch. Seymour Hirsch. Now I, I, I know other than like reading headland and skimming it, that's all I got into. So I don't know exactly what happened there. But I mean, when that happened, [00:15:00] regardless of what ha why it happened, it doesn't matter.

What did they do to Russia? They just stranded a lot, a lot of their gas. And what happens when you. Create artificial choke points on energy and devalue it artificially. Well, you just make an incentive to mind Bitcoin. So you, you presumably, like Russian gas prices domestically would drop with that oversupply.

You know, they don't have that sales point, at least until it gets repaired and just supply and demand and, you know, you have an oversupply, you should see a, uh, price drop at least domestically, and there's gonna be incentives for the private Russian market to come in and arbitrage that. Yeah, so private.

Yeah, private. Or it could be like, it could be like Putin behind it, you know, but it doesn't matter, right? It's just economics. So like, if it's, and of course the sanctions, uh, economic sanctions, uh,

**Marty:** yeah, that's what I was gonna say. They come off from the monetary system year and a half before that, and then boom,

**Steve:** they chopped off.

They, they cut [00:16:00] off, uh, their monetary pipelines with the economic sanctions and the getting off swift and whatever else happened there, like before the pipeline seizing their reserve assets, seizing their assets, and then. And then of course the pipeline, like severing their actual physical pipelines. I mean, it, uh, that's sort of what bitcoin's good at.

It's, uh, it's bypassing, uh, fiscal barriers. Of course, that's what it's designed to do. But Bitcoin mining in the physical realm bypasses energy, um, uh, bottlenecks, transmission, whatever. Yeah. Yeah. So it's fully natural for that. And I, I know in, uh, back in October, I think I was, I was like, Russia's gonna be mining a lot of Bitcoin soon.

And, and a lot of people don't like that narrative cuz you know, like if, I don't know, like, uh, might be really pro-America or something and you don't want to hear that. But I mean, that's just what happens if, like, if, I mean, Russia's a big power and if they have a lot of energy, so they're gonna be doing it anyway.

Even if they could [00:17:00] sell all their stuff, they haven't just like, you know, uh, they have a lot of energy based and they're gonna have a lot of energy waste and, uh, arbitrage to come in and turn some of that into money. Yeah.

**Marty:** No, it is scary cuz there's a lot of Bitcoiners like stop saying that. Like we don't want Russia to be mind Bitcoin, the government here is gonna say like Bitcoin sanction now, but it's happening.

You have to Yeah. Come to grips with the fact that it's happening. It's a good thing that's happening. Ash rate's decentralizing geographically. Bitcoin works. It's a validation of the protocol actually doing what we believe it can do. Like Russia, whether it's trying to monetize their stranded gas assets or route around the financial sanctions and thrust on them, or a combination of both.

Like that is a validation of Bitcoin working. And then the onus is on us not to be like, oh, don't pump this Russian narrative, cuz they're gonna like, bring the hammer down here. Yeah. It's like, no, Russia's using it. And we really have to engender a sense of urgency in [00:18:00] the people who want to kill Bitcoin here.

Like, if you fuck this up now, they're gonna have such an advantage over the next decade that you're really gonna set us back.

**Steve:** Yeah, I don't, I don't think there's any need to like sugarcoat what Bitcoin and is capable of doing. Like, even if it's for your enemies, like what do they say? Like, money for enemies, right?

Yeah. Like, uh, you know, um, people don't like, people like to sugarcoat the fact that it is really useful, uh, for people that do want to circumvent, like tax law and stuff. Like if you, if you really, if you're into that, um, Bitcoin does that and people don't, like, you don't see any of the main Bitcoin promoters, like, uh, influencers, like the sailor kind of people, uh, talk too much about that cause it's sensitive and it's like you don't want to shed light on, uh, aspects of the technology that people are taking, like using Bitcoin and Dollar are gonna exist together.

What's

**Marty:** that? Bitcoin and the dollar are gonna coexist again [00:19:00] for a while. I don't know.

**Steve:** Well, I've always thought the dollar is gonna go back to a gold reserve, um, in reaction to Bitcoin, uh, because they'll have no choice. And, and, and so like, yeah. I mean, fiat money as a, if it's reserved by something, um, it has its purpose.

Like, uh, you know, there's, there's need. I, I think there's need for fiat reserved by Bitcoin. Like, uh, maybe more in the future, like when it's more stable, stable, uh, price level wise. Yeah. But Fiat has a, like a, a note, an IU note has a purpose, um, that's useful. Um, so I use 'em all the time. I lose bets to my buddies and I just say, I owe you 50 bucks.

And then I just text 'em, I owe you 50 bucks, and when I get around to it, I pay 'em 50 bucks. Right. So that's a Yeah. Note in a way. Yeah. Just that text message. A barber

**Marty:** buck, if you will. Yeah. And I owe you, I

owe

**Steve:** you 50. Well, I was on for, yeah, I was on, uh, on this thing for a [00:20:00] while. I was tweeting about it years ago.

I wanted to create a shit coin called Soy Coin, and it was, it's called Ethereum. It's, yeah, it's better than Ethereum. It, it would be, it would be, it was soy for, because Steve owes you acronym. Acronym. And the, the shit coin was gonna be a Google spreadsheet and you gimme Bitcoin and then IOE Bitcoin, and then you can trade your spreadsheet line items with other people.

**Marty:** Actually sounds pretty scalable compared to other shit Bitcoins. It is,

**Steve:** yeah. And it's, it just me being a Bitcoin bank and I'd take a fee, like I'd take like 2% fee and, uh, but in theory that kind of thing works. Like that was obviously a joke. Like, I'm not interested in actually being the guy doing that thing.

But, um, in theory that kind of thing does work. It's, that's what banking is. Yeah. It's like, hold my gold, I'll save, I'll keep it safe and I'm gonna hire the men with guns. And, uh, You don't have to do that. Yeah, yeah, yeah. So, you know, it does make sense in [00:21:00] theory.

**Marty:** Yeah. Yeah. It's gonna be very interesting. I mean, we're here, you're here for a debate tonight with Jesse Pelton about the most sustainable way to my Bitcoin.

Is it hydrocarbons or not? Mm-hmm. Wind and solar. Um, but again, I wanna jump into like mining more generally. Obviously we have a lot of stuff going on in the states, Elizabeth Warren and others saying it's bad for the environment, we need to stop it. Uh, state laws here in Texas, legislator's got some bills on the floor that would not be good for.

Is that gonna

**Steve:** go through? I've been seeing people tweet about it, but I, I dunno what's going, I don't think

**Marty:** it's gonna go through. I think it passed the Senate. It's not gonna pass the house or vice versa. Um, it doesn't look like it's gonna go through. It's not like encouraging to see that type of thing get passed.

Not

**Steve:** in Texas,

**Marty:** eh? Yeah. Right. But this is, this is something very interesting to talk about. Geographic concentration, or excuse me. Yeah. Geographic concentration of hash [00:22:00] rate in Texas with mega mines, particularly, which I know you have particular thoughts on. And then the centralization of mining pools, like what are your, what are your views on the state of geographic centralization, concentration of hash rate here in the United States, particularly Texas, and then what we're seeing on at the mining pool level as well, because mining pools are arguably the biggest attack vector.

And then after them, probably like the mega mines, they're just huge targets.

**Steve:** Yeah. I mean, I think the mega mines are, uh, a natural, um, it's natural for bitcoin mining to have gone. You know, uh, this route of a lot of massive mining operations. It's, it's for not that it's easy to, to do, uh, to execute. Um, it is, uh, um, for people that have a lot of fiat to invest and that want a vehicle, maybe they're actually bitcoiners.

A lot of 'em, I [00:23:00] think are just, you know, uh, fiat maxey that just want to put their money somewhere and, and going, going this big mega mining route makes a lot of sense. It's sort of a, it's a real easy way to scale capital. Yeah. With a predictable, linear, pretty much linear, you know, return on investment as you scale it, which very few industries offer.

Texas is an amazing place for it. Um, pro business, big energy, uh, availability, a lot of wasted resources in West Texas. Wind that need, uh, need to go somewhere, stuff like that. A lot of flaring, right. And a lot of, uh, associated natural gas that. Um, has had for quite a long time now, just cuz of the shale, call it the shale revolution, like the, the new tech and oil field has seen, uh, low gas prices.

So like Texas is a great place for all this. And you got reliable coal too. Reliable coal. Yeah. Um, uh, a lot of good coal and I think, I'm not an expert, like, you know, I don't, I've, I've, [00:24:00] I've done a little bit of work through my, with my clients, learning through my clients. Like I've never really approached a ra like a utility and like tried to get a deal done or, uh, you know, I've never looked for on grid projects, but I mean, Texas seems like it's a, of all the different, you know, uh, utility jurisdictions across the us like those, those groupings, I, I forget what they're called.

Um, Texas is a good one. Like there's a lot of private power generation and so I, I, I think Texas has got a good future in, you know, the power plants themselves, mining Bitcoin, which is sort of what I've always advocated for, I think. The generators should be mining Bitcoin, it makes the most sense because it's physically capable of just being at the generator.

Why would you go downstream? Right. Um, which, you know, you said that maybe, or you sort of alluded to that I have opinions on mega mining, which more so, uh, relate to that. I think they're like a symptom of, uh, this early phase of [00:25:00] bitcoin in, in like industrial bitcoin mining maturity and that I think they're gonna keep moving upstream.

Mm-hmm. Like towards, uh, the power plants, like over time. That's the name of your company. Yeah, pretty much. Uh, upstream oil and gas, upstream data. Um, but yeah, the mining, moving upstream is, uh, is a big thing that we're trying to invest in our products. Like, I, I don't know it, it's already happening, but like, you know, we want to be prepared and have the product suite for them.

Um, like, uh, I'm finally doing like a bigger load center, like a two megawatt version. Mm-hmm. And like that, that version is for mega miners. Um, so I mean, like, I, I, we've, my company's never really gone after them, like in terms of a supplier, like, we want your business. Uh, but personally, that's something I'm switching to within my company is like starting to talk to these, uh, big companies and saying like, you know, let's try one of our products.

I think it'll [00:26:00] outperform like, you know, the other stuff you're using. And, uh, generally speaking, like I think we're gonna see more power plants do it. Um, even wind, you know, behind the meter wind, like which people like are doing projects there. But, but I'm more interested personally in behind the meter thermal, like coal.

Yeah. Natural gas, um, and nuclear. But anyway, but anywhere it is, like, it doesn't, I'm, I'm really agnostic, like if, if my product works and it's gonna make you money, I'm happy to, I want. I want that job. Like, I want that, I wanna work with that, uh, power producer. I mean, we have, uh, we had some cool installations of our little, uh, black boxes on like solar farm and greenhouses and stuff.

So, you know, we support our customers wherever they are, even though I might troll online. And April Fools joke as I'll be trolling in this debate later about what I, my thoughts on wind, solar and the like, so,

**Marty:** yeah, it won't get to your pitch on Cole, but [00:27:00] speaking of Cole too, will Cole, yeah. C o l e. I

**Steve:** told him to change his name too.

C o a l. But

**Marty:** we've been talking, I mean, obviously, um, they have very big connections in Wyoming and they have this problem where Wyoming's coal country in the west. Um, and they for years have been producing electricity at their coal factories and transporting it to California and other states, uh, California since said, Hey, we don't want your.

Your electricity produced by coal. We're gonna shut that down. Allow the rolling brown outs to happen over here. Yeah. But we're not gonna take it. Um, but as it has created,

**Steve:** we want

**Marty:** Chinese coal Yes. In the form of solar panels. Yeah. Kohler panels. Absolutely. Yeah. Um, but in Wyoming you have all the stranded coal, uh, power plants that don't have end customers in California anymore.

Mm-hmm. And they're like, what do we do? Yeah. Just

**Steve:** mine. Bitcoin. Yeah. I mean, coal is cheap. Um, [00:28:00] ignoring like, obviously there's always gonna be the emissions, uh, concerns, but from a peer economic standpoint, coal is a good, um, candidate. And, and, and the other thing people don't talk about very much is, uh, if you have a, if you have a coal fired power plant or any, really any thermal power plant, like running well under nameplate load, like under loaded, uh, they, they, they are less efficient.

Uh, their heat rates go up. So an example of a coal plant, if you're running it at, I don't know, 50%, you end up burning more coal per kilowatt hour. So the by lo, by having a Bitcoin mine co-located there. Like ideally the coal owner, coal plant owner owns the Bitcoin mine and is self mining to maintain a load balance on its plant, which is sort of what we do already at a mic, at a micro level with the oil companies, right?

We, we sell generators and with Bitcoin mines and they manage their [00:29:00] load on their generator all the time and then the mining load will uh, switch on or off or overclock under clock based on what they need, uh, to sell power or not sell power in their case, like to use power for their well site. Mm-hmm.

Cuz their well site might demand more power or it might have less fuel supply and so the Bitcoin mining load will shed or ramp up in response to that. And that's what power plant should be doing. Um, and. I think for a lot of 'em it's uh, it's still a bit of voodoo magic, this Bitcoin thing. Uh, but there's enough third parties now that are willing to put their capital, uh, and risk it and do some kind of revenue, capital risk allocation split.

Yeah. Um, which is sort of what I'm, my company. Like I want to push into in terms of working with these groups to supply them what they need. Cuz our systems already do all of this. And so you just transform the power to the operating voltage. Put it at the coal plant, like literally right next [00:30:00] door in the parking lot.

Yeah, yeah. Wherever you want. Yeah. And just run a, you have a base load all the time and, uh, you're always gonna wanna sell power to the grid. Cause the grid should, in theory, in a free market, uh, demand more for the power than a Bitcoin miner will. Uh, so you'll always sell what you have that the grid wants and the rest, just send it to a Bitcoin mine.

Keep your heat rates optimal. You know, keep your coal consumption rate per kilowatt hour, optimal coal, or you know, if you're natural gas or whatever, any thermal power plant. So yeah, there's, I, I think there that's gonna be huge. Like, that's gonna be a huge part of it, of the American mining experience over the next decade.

Yeah. And

**Marty:** it's been a couple years since you were on, it was during lockdowns. I was still in Jersey. What has the appetite for Bitcoin mining across the energy sector been, whether it be at the power facility, uh, or upstream, oil and gas? [00:31:00] What are you seeing right now? More people getting it intuitively, obviously, upstream flare, gas, mining, godfather flare gas, mining, sitting right here, uh, that became a big meme, like 20 20, 20 21, died down a bit.

Cruz's been in the news recently, like mm-hmm. From your perspective or more of these producers, Starting to get it or we still have, uh, some education to

**Steve:** do. Um, I think most of 'em get it like, uh, our struggle. Like we don't like my company for example, we don't like go finance everything and make it, give them a silver platter cuz it, like I just, I know the numbers and it doesn't scale well.

Uh, cuz most of these guys that do that, um, like Cruso and others, uh, they'll put all the capital into the deployment or just about all of it. And, uh, there might be some risk chair on like operating or installation or whatever, and then they'll pay them for gas that's being burned. It's worthless gas, [00:32:00] right?

So, uh, our, our business model is we, we only work with, uh, companies that take risk. So they have to buy, either supply their own or buy our generators and then we'll work with them. Like we'll give them. The rest of the equipment and do some kind of, it could be done in a million different ways. Both some kind, effectively some revenue split.

**Marty:** Yeah. I'm a very happy customer myself. Yeah. You've got good engines,

**Steve:** sir. They're only getting better. Um, I mean, since the last time I was on this, like, I don't know what date that was, but it was probably sometime in the bull market ish. But covid, like our company's changed a lot. Like, uh, struggle I have with our company is like when you start out and you're not, we never started like well funded.

Like I basically built it from a piggy bank and uh, just slowly and surely sold stuff and grew it and we, and so we never really had the ability or didn't go [00:33:00] leverage so that I could just go do things, like to go fix some issues. I'd like to fix, like for example, one of the biggest issues I've had and resolved is, uh, the supply.

Like I had a subcontractor for engines. And, uh, you know, that that's when you get an engine that's like rebuilt from them and then it doesn't work like, or it'll work, but like it has a premature failure, like heads burn out, uh, maybe there's an oil leak, uh, something like, uh, the rear seal or, you know, whatever.

Uh, and then the customer's dealing with that and now I gotta go warranty it. And, you know, you're, you're trying to beg your supplier for assistance and it's just, it's just a nightmare. And so early days, that's what I had to do. I had, uh, I had no one on staff that could do it. And so that's part, part of our growth is we now have a whole staff and we just have a set up, a machine shop, uh, to support, uh, not just our own builds, but like third party builds, like guys that need engine work done.

Mm-hmm. [00:34:00] So we're sort of build, I'm building an oil field service business around power generation, and they, uh, obviously for us upstream data like folks on Bitcoin mining, but we also will do the peripheral stuff as well. So we have a broad business like in oilfield and in Bitcoin mining and on for grid.

You know, we manufacture for grid based, uh, bitcoin mines and stuff. So, yeah, I mean, there's been a, a lot of changes in our product and our staff and our company's size and our facilities. Like, it's been crazy couple years. Yeah.

**Marty:** But you guys have been pushing out a lot of product. One thing I'm excited about, excited to talk about pick your brain about right now is the hydro units water cold

**Steve:** units.

Yeah. Yeah. We got our hydro hash generators. Yeah. Yeah. I mean, I'm really interested in, uh, the mining tech side, like what they're, what the big boys are doing for developing new product, right? Like, uh, I'm personally a big fan of micro bt. Uh, same. Yeah. And, [00:35:00] uh, you know, Bitmain, I, I know that from my own customer base, like we've seen better performance out of micro BT units.

They're not nameplate, maybe as efficient, but you should also see problems with bitmain units on thermal management, which derates their efficiency and stuff. You know, on Twitter recently it was shown that like the new s nineteens just went back to an S nine style hash. Mm-hmm. So not to knock bitmain, but like they, they clearly had reasons they had to go do that cause they were trying to solve some problem they're having.

I think it had something to do with their aluminum substrate on their hash causing problems. I'm not sure. Don't quote me on that. But what,

**Marty:** can you, can you point to what that would be on this?

**Steve:** Yeah, what do you got there? That's it. An S one. Oh fuck. Wow. Yeah. Um, that's vintage Ben. Yeah, well they got individual heat sinks in every chip.

Right. Yeah. And I think that's a big step backwards for tech. Yeah. I'm gonna like rip my shirt if I stand up. The shirt's so tight. Yeah, [00:36:00] so

**Marty:** on the S one, like i'll fat, these heat sinks.

**Steve:** Oh, that's pretty cool. Well, I mean, that's cool because they have a slab style heat sink on one end. And which is like the right way to go from uh, you know, you're in har especially with us, we're like in harsh environments.

You, you don't, you want to, you want to, you know, you don't want to expose the pcb like the circuit board to the elements as airs blowing through and stuff. Cuz if there was a failure and there's like snow or something in there, you'll short 'em out. Yeah. That's one thing we've seen with like micro bt, like the boards, because they have the slab heat sinks.

They, they operate at high temps, they have higher thermal differential like heat differential. Um, so they can operate in hotter weather. You got their beast. Yeah. I'm sort of just shilling, micro VT and sitting on bitmain. But I mean the hydro, like they both came out with hydro, like scalable hydro units.

Um, I think the market consensus from what I've seen [00:37:00] is that, From anyone like looking at the tech side of things like the micro BT racks system and server system is way better. Mm-hmm. And I know for us, like for how I build our product, it's way better. Um, they're also more willing to work with you, like work on a cabinet design with you to fit your, you know, like, like us to them.

Like we're a system integrator. Like I build their systems into our systems and sell the package and they seem to be willing to work that kind of business model. That's why I like micro bt. Um, Bitmain seems to always try to do everything and uh, so they build all their own containers and package it all and they don't seem to build a system.

Like I can't go integrate their hydro cooling system into our builds. It doesn't make, it's just not set up that way. Yeah. And then, then there's the whole like operationally, which is superior, I believe. Uh, I like the micro BT version. So yeah, it's a newer product for us. Uh, I like it cuz uh, hardest thing.

Even now that we have [00:38:00] control on our engines and like, we don't have to deal with engine quality concerns anymore cuz it's our engine. We built it and we know exactly what goes into it and if we do screw it up, we, we make sure we never, like, we fix it. Like I, we had some hoses that burst on the coolant and, you know, they're faulty, uh, from supplier.

So we, you know, things like that. But we have full control over and so we can go warranty it. So like, you know, when we're building these systems, which are sort of complex systems or micro power plants with a Bitcoin mine, with maybe some low control HVAC control in the middle of nowhere on a farmer's field and like, we're selling 'em to people who have varying capability in actually managing it.

Like some of 'em don't have a lot, but they're interested in learning and they're awesome to work with. Some of 'em people, uh, don't want to do a damn thing. Mm-hmm. Like, they don't want to change the engine oil even like, they're, they're just didn't know what they're getting into I guess, or they don't, they weren't set up for it.

So the one thing I like about the water cooling units that we're [00:39:00] building, um, they're in theory like we we're still, I wouldn't say we are commercializing them, but like we're It is still early. Yeah. Like we haven't run through a full summer yet, so we're not like really pushing 'em yet. Cause I want to be, I wanna make sure like things are gonna run really nice.

Um, but overall the system is uh, a lot more dummy proof. Uh, cuz air cooling, you, you do need to maybe a little more active management sometimes like on like by the end of here. The water stuff is so far I'm pretty impressed with. Yeah.

**Marty:** It's really just slick. Yeah. And then so that's another thing. So to dive into and for any of the freaks who may not be aware of the nuance of the differences between air cooled immersion cooled and then water cooled hydro, which you're building, why hydro over immersion and then what are the trade offs with hydro versus air cooled specifically?

**Steve:** Yeah, sort of like there's like crossover right between [00:40:00] them, like immersion, immersion in, in water cooling. I mean, the difference is the in immersion, you're literally immersing the pcb, the dashboard in the fluid or like the whole thing's enveloped in the fluid and transferring heat directly to the fluid.

And while the fluid itself is a weaker conductor and weaker on heat management than water is, um, it is a direct contact with the chips. So it has that advantage. Whereas water cooled, uh, you have an interface, like a cold plate, like a aluminum plate basically interface. So you have that conductive layer before you, the heat escapes.

So there is some arguing argument that, um, immersion system is better for thermal management on a hash board. The problem is with, uh, with immersion, I would say there's a bunch of things I don't like about it. Um, sort of like. One is one, one simple one is like when you're building mobile modular systems that you can, [00:41:00] our stuff is designed like all the same parts, basically it repeats.

I can build like the smallest unit, you know, we can build like 90 kilowatt up to like two megawatts. And I'm, I'm using all the same components. I just keep building modularly and, uh, we're always building portable systems. I believe in portable mining infrastructure just cuz of what we see constantly by politicians like attacking us.

Mm-hmm. Like, I really think it's silly. Like, I, I mean, not to say it's a bad idea cause there's a lot of reasons why it's still a good idea, but like, you know, when you build these massive mega firms and you can't move them, you're at risk of sinking a lot of capital Never to be recovered. Yeah. Um, if someone inks gets the ink out and says you're done, like, which can happen

**Marty:** And, uh, well, it's not, it doesn't even have to be that.

Well, another way I guess you could get in the ink out. Maybe you'll touch on this tonight, but like another thing with like wind and solar megabytes, particularly like those subsidies run out, those operations come unprofitable overnight. It may not even be like a [00:42:00] regulation, like you can't mine here.

It's just like, oh, we, the government went poor. We don't have any more subsidy money.

**Steve:** You're fucked. Yeah. Yeah. And those subsidies are, um, I mean it could, that's the thing, whether it's like regulation that puts you outta business or market puts you outta business. Like something in the market

**Marty:** changes.

Yeah. And upstream oil and gas, the flare you can be done drilling the, well, you have no flare. Mm-hmm. You gotta fucking move

**Steve:** the container. Yeah. Yeah. I, I've always advocated and it's sort of self-interested cuz we build these systems, but like, I, I build them because I think it's the reason I never got into engineering and doing retrofits of like warehouses, which there is a market for that.

I'm just, I just don't see it scaling. So I wanted to build a product that you could put anywhere and, uh, we do that. I think we do that really well. Cause we have all kinds of products that go at every level of Bitcoin mining. Like even the little ones. Mm-hmm. Like our 12 minor black box. Like it's a little eight foot box that you can just sit in your yard and not, not cut apart your [00:43:00] walls, who you're building.

Right. Like there's little things like that we're trying to go after every aspect of the Bitcoin market. But yeah, I've always advocated for portable, uh, cuz you know, I, I just am ultra paranoid on what the politicians are gonna do. And then of course there's also the market. You can't control the market and the prices might fall out.

All of a sudden you invested, you know, x percent of your capital on your project into your brick and mortar facility, which is now, you know, a warehouse, like good for nothing. Whereas at least when you invest in portable infrastructure, like the container side of things, like, or our load centers, like they can be, you know, you can just liquidate them.

Yeah. Even if you take a loss like, uh, off nominal purchase price, like, It's not hard to do. Yeah. So, yeah. I mean that's like the, back to the immersion though, like the moving things around with these bathtubs. Mm-hmm. Like, uh, uh, [00:44:00] these bathtubs of fluid. Um, it's not like it's rocket science, but it's just like a pain in the ass.

And if you have a spill, it doesn't matter if it's like, if, if it's, uh, you know, it's, uh, MSDS sheet. Like if it's like not a toxic fluid, if you spill that on an oil well in Canada, at any big oil company, it's tech. It's, it doesn't matter what it is, it's a reportable spill. Mm-hmm. And the CEO hears about it, so like, You know, it's just one of those things like hydro, I like the hydro, uh, tech because it's isolated.

It's just distilled water. It's like closed loop and closed. You can spill the whole damn thing. Um, and really it's no big deal. Um, if the whole damn thing leaks, um, the closed loop system, it's, it's pretty slick set up. Um, everything about it makes sense to me. Uh, and I don't think, um, while, while immersion has certain advantages, I don't think it overcomes [00:45:00] its disadvantages relative to what, you know, water can do for you in the same situation.

Yeah. Like even the heat. A lot of the people that do it, like the overclocking aspect, which maybe emerge best at because it arguably is the best thermals, but thermal management. But, um, overclocking is sort of a bull market activity first of all. Yeah. It's not like a, it's not a long term activity. You don't run things inefficiently.

You do it at peak efficiency, which is not overclocking. And, uh, so long term it doesn't make a whole lot of sense. Like they care to overclock, um, like, like as a routine. And then water cooling can sort of do that now pretty much as well anyway, so it's like, yeah, don't know.

**Marty:** Yeah, that's what I was gonna get at.

What are like the advantages now bringing like water cooling versus air cooling? What are the advantages? Better efficiency at the machine? Does it elongate the life cycle of the machine? Well, air

**Steve:** cooling, I still, one reason why most of my personal time has been [00:46:00] constantly improving our air cooling systems, uh, is cuz I think there's still lots of room for, uh, them to improve and I wanna have the best product in the world.

And two, I think the industry of air, like air cooled mining is still gonna dominate like all the way into the future. A lot of people have thought, you know, maybe immersion's gonna dominate now some people that love water think water's gonna dominate. I've even seen micro bt sub, uh, heat core, uh, the company that sells that equipment.

You know, say that of course they were, they don't, you know, they're selling it, but I don't agree, like I think air cooling is still the future. Um, because it's, uh, I think there's a lot like you just showed that S one hash, um, it's got certain aspects to it that are pretty good, but that, you know, you can keep improving on how that is enclosed.

Like that PCB completely make it, you know, um, free from damage risk and all of a sudden you have an air cooled unit that can operate the same efficiencies as a water cooled unit. So you still get the same energy [00:47:00] input and, and revenue output like peak. Mm-hmm. Uh, like, uh, peak efficiency, um, but at the lowest CapEx.

Yeah. And, uh, everything's cool by air on earth anyway. Like it all goes, it all goes back to air somewhere. It's just like, how many steps do you need to get to the air and direct from heat sync to air? That's why, like I said, this is why I keep building air products, cuz I think it's just the way to go.

Yeah. And I'm, I'm honestly quite happy to see. Um, people shift their focus to other, other products. Cuz I just want to leap frog everyone on, on the performance and take the market.

**Marty:** Well I cannot vouch disclaimer. Upstream customer. Upstream investor too. Um, be a 10 31, but I mean they work like I've had my hash up plugged in for well over a year now and the only downtime we have is the, the oil changes.

**Steve:** Yeah. You got a hash generator, an older version. [00:48:00] Yeah, we have like, uh, just sort of brought in these like industrial motors that were, um, we, like I also started the company on small projects cuz that was the most widely, you know, wide customer base. Now of course you got one big mega mining customer and that's all you need, right?

Yeah. But, but uh, I also want to build a suite of products, you know? Um, build a really great product, um, get IP on that product and, and just like, you know, have a great product in the market for a long, long time. And I always felt like if I can't build for all the little applications, you know, someone's gotta do it and I want to be the best at it.

Like, that's not that we have been, I mean, we've made a lot of mistakes, but we're always trying to improve. So, you know, even like we started with little engines and now we're getting up to bigger ones. We're up to 22 liter engines now. Oh yeah. So it's 360 odd kilowatt. Any, any, it'll run anywhere between 300 to 360 [00:49:00] kilowatt.

Um, that's all I plan on in, in the very near term, but like, past that, we'll go bigger, uh, when it makes sense. If it makes sense. Yeah. No, it's,

**Marty:** um, it's been cool to see the, the progress, the progress that you guys have made in the iterations and it's fun.

**Steve:** Yeah, I'm really, my new, my newest version I'm super pumped about.

I'm just trying to get the word out there and get people to see it. Um, you know, I know I'm just shilling my product now, but just shill it, shill, it's uh, it's badass. Like, uh, I sort of, I don't know what I was thinking. Like, cuz I'm the principal designer. I come up with the main concepts and I work with my team on it.

Like, I'm not, um, saying it's all me, but I, I'm, I'm the most motivated, so I'm always thinking about improving it. And I just sort of realized one day I'm like, why am I building, uh, buildings in a eight foot footprint, like container sort of style. Like I can build anything. Cause we, we do self fab, uh, self framing, metal [00:50:00] buildings, whereas, you know, a lot of guys are building retrofitting c cans and stuff and they're limited to that size.

And I was like, man, why am I, like, I'll just widen, you know, there's a cause I was having some issues. I'm, I honestly, Fucked up on, uh, fan choice for one of our product lines, which ended up being a big deal. Cause we built a lot of them. But when I was redesigning it, I'm like, man, I gotta, I want to put the fan on the intake so it's never in the heat.

I want a booster fan. I want it to be actively, you can turn it on or turn it off. So it's passive cooling or active boost. Um, I want the best filters. I have like a two layer filter system now. I passes through two, uh, filter systems. Um, and then, and I, when I was designing this, I'm like, man, fuck, I can't fit it all in.

I gotta do something. And then I'm like, why don't I just widen the building? It's the stupidest thing ever. But you get stuck in this mindset. Mm-hmm. Like, oh, I have to build a compact, has to be eight foot wide. I'm like, uh, for shipping. Right? And for other reasons. [00:51:00] And I'm like, man, what am I doing? Like, it's good.

That's, it's good. I'm happy. I have some really good guys on my team too that are like, why are you doing this? Like, this way? Like, like they hated working on it. It's too narrow and stuff. And I'm like, I don't know. Why are we doing this? Like, no, let's, let's make that better. So anyway, we, we went through a lot of, a lot of, uh, like, uh, spent a lot of last year testing this redesign and, and, uh, doing something I didn't do enough on the pri prior version, uh, with the bad fans and, uh, yeah, pretty, pretty happy to get it out there cause it's pretty, pretty badass unit Now.

Do you have to get wide load trucks? Nope. It's still, uh, well it's actually 10 foot, so it, it's technically a wide load, but it's before the permitting point. Okay. If you go over 10 feet, you have to permit it. Okay. You have to, uh, sorry, not permitted. You have to get a pilot vehicle, uh, in a lot of, a lot of different, um, you know, different, uh, routes across the us.

So no, that's like part of the [00:52:00] whole design philosophy is like, keep it easy to move. Mm-hmm. And not an easy to set up and smart performing wise. Like it's all got heat recert built in. Um, we, we definitely have the best heat recirc in the industry. So for cold weather, our stuff is just badass. Um, yeah, all of our new stuff is pretty slick.

Oh yeah.

**Marty:** Is cold. The future is what? Cold. Yeah. It's cold. The future? No, you're instigating

**Steve:** me now. No,

**Marty:** I don't instigate you. Coal is, uh, I do because we have to get to the Yeah, we do debate soon. But what time I do wanna touch on it because like the whole environmentalist debate like that, and that's one thing I think we agree on, but I've really been pushing for a couple years now is like, like the mining industry.

Like those who are like, everybody needs to publicly disclose their emissions data. Like give it to the government to prove that we're all using green energy or whatever. We just need to reject [00:53:00] the frame and like, embrace coal. Embrace. Well, coal is

**Steve:** such a big part of like, humanity, right? Like we've, it's been around for thousands of years.

Uh, It's just this weird cult that exists now that's like anti useful things because under the perception that it's somehow a net negative when it's clearly a net positive. Um, yeah, coal, I mean coal does so much for us, so much like these walls, you know, everything is made, like everything's got bits of coal in it.

Like, uh, even combusted coal, that's one cool thing about coal too, is like you burn it and even the sh the, the shit that gets burnt, the fly ash and the bottom ash gets used. Used for something, right? Yeah. That's like a derivative, uh, byproduct. And, uh, and that's not, that's ignoring all the upstream, uh, uses of the raw coal itself, like in manufacturing and production of different goods.

I filter by water with coal. Yeah. Well, charcoal probably charcoal. Yeah. But you can make [00:54:00] charcoal out of coal. Yeah. Um, and a lot of charcoal is industrial industrially made in, um, Uh, refineries or upgraders, like through the cracking process of crude oil and, and different coal processes. But, you know, the thing is like, it's this, we're in this weird cult where everyone's, everyone's just concerned about carbon emissions and like, you know, coal, coal oil and gas, um, you know, um, coal, like these, these things like no other animal or organism uses them in any significant way.

And like, so why would we not want to use that? Like, it's just this dead matter, um, molecule like hydro hydrocarbon cane chain and nothing else uses. And why do people want us to stop using this? Like instead of using it then we want use our biosphere harvest more trees. Mine more earth, because you literally have to mine more earth to build roads if you don't burn coal.

Cuz we use coal aggregate to build roads Yeah. [00:55:00] As infill. And so like the censorship of, of this stuff like, In the, in the media, uh, and tricking people into thinking it's bad when, when it's like tricking people to think it's a net bad, when it's clearly an overwhelming net positive with some bad aspects to it.

**Marty:** And are they even that bad? I

**Steve:** mean, small, not really. But there are certain things like coal mining, like different forms that, you know, there's different forms of coal mining. You have a

**Marty:** coal mine collapses.

**Steve:** That's that good. Well, stuff like that. Yeah, you'll have like tailings ponds and certain mining aspects.

Like there's certain things that we have regulations in place for, for a reason, like makes sense. So sense you don't go dump it into waterways and stuff, so there's always gonna be some negative, uh, you really can't actually use any of our environment without some negative consequence. Right. So it's just really what's the ratio positive to negative And, and, uh, all this stuff is overwhelmingly positive, but it gets ignored because it says it's carbon emissions.

But are carbon emissions even bad? Well, you know what I think, which [00:56:00] is no. Um, it's, it's not a. The, the biggest scam going on right now is this whole carbon accounting scam. Uh, Pierre ards on it. I'm happy to see him on it. Finally, is that

**Marty:** the best troll we've

**Steve:** seen in a couple years? It, it's been the best troll, one of the best trolls in Bitcoin history from one of the best meme trolls like Pierre.

Like he's a legend at this. Uh, so I was happy to see that blow up, especially with him. Cause he's the perfect guy to be behind it. Just dead pen. Oh, yeah. Yeah. And his history of him and Goldstein and, you know, they have a history of great Bitcoin memes, right. So it's just perfect. But, you know, and he, he's brought attention to it and he can articulate it better.

Cause he's like got an accounting background, but this whole carbon thing is an accounting scam. Yeah. Like

**Marty:** what is it? Scope two, three emissions. Like what the

**Steve:** fuck are they even? Yeah. And they don't like, these accounting methodologies aren't applied appropriately to other. Industries, like even if you're gonna use it, which makes no sense [00:57:00] against like, I don't know, oil and gas or bitcoin mining or whatever, you'd have to use the same methodology against like solar panel manufacturing.

And they don't do that. They just ignore it. Yeah. It's just not done properly. Um, yeah, I could go on for hours on that, but I guess that's part of what I have to debate here in a

**Marty:** second. Can we get a little preview? Are you gonna, what's the, uh, what's the inside scoop? What's gonna be your, I'm just,

**Steve:** do you have a Trump car?

I'm just sort of coming up here to wing it and, uh, we'll see what happens. Uh, but, um, well the debates, uh, for the people listening, it's like, uh, I think the statement is like, hydrocarbons are the most sustainable, uh, form of Bitcoin mining. That's the statement. And I'm on the pro side, like I'm on the Yes, that's true side.

And, uh, my opponent Jesse's on the no side, so I guess we are gonna make our cases on why and try to sway the audience. What's

**Marty:** your case? I mean, Nobody outside these walls can hear us. And this won't be published before the debate, but what is the case for hydrocarbons being [00:58:00] the most sustainable energy source for bitcoin mining?

**Steve:** Yeah. Well, without trolling and getting into the, the mocking, uh, solar and wind, which I'm planning on doing up there, uh, uh, it, it really comes down to like economic. Um, do you hear

**Marty:** that? Yeah. It's outside. Is that a base? It's, uh, some consensus losers out

**Steve:** front. Oh, that's going on right now? Yeah. Oh, what a bunch of nerds, eh?

Yeah. Um, literally. Yeah. Well, we're talking about the sustainability, so I'm talking about the economic sustainability, um, of hydrocarbons generally, and, and the future of mi, you know, mining as it relates to that versus like the opposite, like nuclear, wind and solar. So there's the economic, you know, aspect of it, the.

You know, um, more or less, I'm gonna mainly illustrating why like, like, uh, there there's better allocation of resources with hydrocarbons, uh, generation. [00:59:00] Cause we're talking electricity generation mainly not like the other uses of hydrocarbons. So like for elec electricity generation, there's better allocation of capital, um, in, in natural gas, coal generation, um, than there is in like wind and solar.

And so from a, from an economically capital allocation, it's more efficient, which relates to environmental efficiency because your capital, um, use is, is a direct, has a direct impact on the environment. You can't spend money without consuming the environment, right? Mm-hmm. You're paying for man hours and people are consuming things and you know, they're transforming the earth into product, right?

So, so there's that aspect, which I'm sort of getting into. And then the other side is the human sustainability. Um, Which hydrocarbons are better for human freedom? Uh, generally I'm going into, uh, like why, in the sense that they're low tech, uh, accessible to almost everybody. Um, coal being the lowest of [01:00:00] the tech, it's just sitting on the ground and, uh, it's been used already for humans for a thousand years.

It's, it's accessible to people. The, it's like low on the technology stack, so like it's, uh, anyone can, any country can like build coal power plants or has the means to do it in a reasonable fashion. Um, and other, you know, other things to produce oil and gas if they have oil and gas. But e but even for countries that have nothing to generate reliable power off coal, you know, they have the capability to do that.

It's not a high tech and be, and it's also harder to censor. Um, Uh, whereas like nuclear is extremely easy to censor, uh, for the government. Um, yeah because it's so high at the tech stack to do build a nuclear reactor. So it's not like you can't just go start up in nuclear No, it's like anti small business.

Nuclear is, yeah. Whereas like natural gas even is very pro small business. There's a huge [01:01:00] service industry around natural gas power generation like my company. Yeah. Right.

**Marty:** And even if uh, if Bill Gates gets his way, solar could be censored cuz he's gonna seed the clouds and blot out the sun. You're not gonna be able to produce electricity with those solar panels.

**Steve:** It seems like he wants to

**Marty:** do that. Yeah. Isn't it very counterintuitive though? He is like pushing solar and he is like, I actually wanna blot out the sun. And he's like, why are you pushing us towards this? And I don't know, trying to prevent it from actually working.

**Steve:** There's something going on with that guy, man.

If there is a lizard person, it's him.

**Marty:** Who else? Who's on your top five? Lizard people. Lizard people.

**Steve:** Hmm. Well, you know, I have to throw cloths in there.

**Marty:** Umla, Schwab, bill Gates. Elon is absolutely a lizard. You think so? He's got a

**Steve:** weird body. Yeah. Yeah. That's the lizard trying to like adapt into the meat sack.

Yeah. His, his lizard form is a little, he's probably a little bigger and harder to pack in, you know? Yeah. Yeah. Fauci, [01:02:00] Fauci is clearly a lizard person. Yeah. Um, just demonic cult, right? Like these, some of these people are in, in this man hating

**Marty:** cult. Yeah. Justin Trudeau. That's my

**Steve:** five. Oh, Trudeau for sure. I actually, I don't think so.

He's so stupid. Uh, like he's not, the lizard people are, are reasonably intelligent. Okay. Um, Trudeau is a bimbo, like he's an idiot. Uh, he can't even count like the guy's so brutal. And, uh, he's

**Marty:** a theater

**Steve:** kid. Yeah. He's incompetent at, at, you know, on every definition of the word. Like, he's just, he's just

**Marty:** terrible.

What's it like having to put up with him? I mean, we have to put up with Biden. You have to boat up Richard o

**Steve:** They're like, yeah, we're both, uh, we're in a terrible spot. Well, I don't know. I, I, I put up with it by not paying attention at all. That's good. I, I just don't, you know, I, uh, I try not to. Yeah. I mean, I, I have to, obviously there's certain things that happen that affect our [01:03:00] personal lives and businesses and stuff, but yeah, he can't dwell too much on it.

He'd just always be negative.

**Marty:** Are you aware of the Cuban Nipple crisis?

**Steve:** No. What, what

**Marty:** is that? You know, Justin Trudeau has brown nipples, right? Oh,

**Steve:** well I know he's Cuban. Yes. Justin Castro. He's. Very, very clearly. Fidel Castro's Sun. Yeah, it's on the canny. Um, yeah, but that, we're getting off the rails here.

That's little off the rails, but that's where I like it. So

**Marty:** yeah. Now we need to ridicule these people. That's another thing. Uh, actually bring it back to some signal to get a message out there. Especially as it pertains to Bitcoin, Bitcoin mining and the battle we have with these carbon hysterics. We just need to make fun of these people.

Mm-hmm. Like that's why Pierre's stroll was incredible.

**Steve:** That's why. And, and it's funny because a lot of people, uh, didn't get it and they should get it. Oh no. That was the best part. Like, uh, [01:04:00] Niraj, I love the guys, one of the best meers out there, but he was like criticizing the meme and saying, I, I will take, I will give consulting advice.

And I love the guy. He's put out some amazing memes. Like he's a great meme guy. And for him not to get it was really weird to me. Cause I'm like, you're one of the best meme guys in the industry and you don't get how he just jealous. He didn't do it. Could be. Um, I, I just, I think it was a, a deep troll that people, um, even like pro Bitcoin, people just didn't, didn't get it.

Like they just don't get it cuz they're, they're part of the carbon cult, right? They, yes. They think they're not rational thinkers. And so like taking him quite literally, even though literally he's true, it's true. Um, but also just not being able to see the sort of, the sarcastic jab at the bullshit accounting system that they're legitimize.

I think that's part of it, right? Like these people refuse to believe [01:05:00] or can't comprehend that this whole carbon accounting thing and is a complete scam. Yeah. Well and it reveals them to be

**Marty:** fools. Well, exactly. And it was the most effective troll I've seen in some time because again, it was reaction to Bitcoin miners being signaled out as electricity consumers verse.

Anybody else consuming electricity? Me with these lights, with these mics. Uh, the Consensus Conference pushing coins on people down the street, all electricity consumers for some reason or another, whether it be in Canada, here in the United States, other parts of the world, Bitcoin miners have been signaled out as consumers of electricity that, uh, do not deserve access to that electricity cause they're harming the environment.

And what Pierre's Troll did was highly like, Hey, Bitcoin miners don't produce emissions. Similar to how Teslas don't permission produce emissions, like when they're being used, obviously there's a whole front end of both supply chains and whatnot. [01:06:00] Uh, the emissions, if you care about them, are produced at the generation and mm-hmm.

It forced people to be like, well, obviously the Bitcoin miners aren't producing like co2. Like it's at like where the energy's being produced. It's like idiots. That's what we've been trying to tell you for literally like almost a decade now. Yeah. Thank you for recognizing now. Now let's have that conversation.

Why is it bad for me to buy electricity, but, mm-hmm. Um, Tesla.

**Steve:** Well, it's sort of like, why, why are people the, a lot of those like academic nerds that came out of the woodworks to like mock pier over it, like, look at these dumb Bitcoin miners and they're stupid logic. It's like, well, why? Like, why, why is the logic that he's putting forward, which is really just stating facts, like why is that not, um, applicable to the EV stuff?

Um, because most, uh, not all, cuz I know, like, I know like even the New York Times, which he was trolling, has at least put some decent, uh, nuance when they talk about EVs and say that they're actually not [01:07:00] zero carbon emissions. Like, I've seen the New York Times articles write a little bit about that, which is good to see, but like most the marketing on EVs is like zero emissions.

And the Elon says, Hey, like, or whoever says like, these produce no carbon, um, and they get their subsidies and the like. It's like, well that's bullshit. They do, you know, like, they, like it's upstream of them, right. And why are you, why are you singling out Bitcoin miners for saying the same thing? Yeah, because like it just shows their bias.

Like it shows their, well, it's really,

**Marty:** at the end of the day, they can't control Bitcoin and they don't like that. Yeah.

**Steve:** They're not, they're not in on, like they're, they're in on the, the subsidy and the, and the Carbon Cult and the Fiat Cult. Yeah. The bene, like, there's a lot of, lot of fake companies out there that make money, basically just raising money through carbon LARPs.

And, uh, they all love the carbon larp and, you know, they, they don't, when they don't wanna see like Bitcoin get in on that carbon larp because it's, it's uh, at least right now anyway, they haven't figured out how to make money. Like [01:08:00] scam

**Marty:** it, I guess. Well that's, apparently we were talking about that bill in the Texas legislator, um, that could prevent minors from plugging in down here in Texas, particularly with the demand response program.

It's big battery behind it, apparently. Battery, big battery, doesn't want any competition. Big battery. Yeah. So you want, you want these big batteries to like soak up electricity for wind and solar, have excess capacity and then sell it back. Mm-hmm. To the grid. They've invested a lot of money, a lot of subsidy money into that.

Yeah. And incomes, Bitcoin min is a much better, more profitable solution to the problem. Way more profitable.

**Steve:** Way more scalable. Yeah. Um, and way more ethical, uh, frankly, because, uh, I think that's something Bitcoin should lean into is that Bitcoin is battery free and really start saying battery free as if having a battery is a negative, which it technically is.

I really like that. It's a capital, it's a, batteries aren't course, aren't objectively negative. They're very useful things, but like being battery [01:09:00] free is pretty damn awesome. Knowing, uh, you know, the ethical issues with the supply chains of batteries right now. Um, Uh, but of course batteries are, you know, we need 'em for, you know, like my phone here.

But, uh, the fact that Bitcoin mining machines don't need them is pretty badass.

**Marty:** Um, yeah. Not only they, again, they're more profitable to it. That's the other thing. Yeah. Big battery's gonna get blown the fuck up cuz anybody who's making a pure economic decisions like, I don't need you big battery. I've got these mins here and they make me a lot more money.

**Steve:** Yeah. And you gotta realize the people that push the money into these projects, you know, they get paid by deploying money and so they're happy to deploy the money they don't own in these warps. Mm-hmm. These carbon warps, they're ho they're doing it to get the carbon subsidies. Um, but even if, you know, they break even but send, spend a billion dollars on battery LARPs, um, they, their management fees and everything like are through the roof.

Right. They're getting filthy rich doing it. [01:10:00] It's actually something I was interested in hearing. Will Cole, uh, you mentioned earlier, he's been exploring this whole. Coal power plant thing in Wyoming. And apparently there's like limitations even in Wyoming on how much profit a coal plant can make. So there's like, like they're, they're killing the coal power gen industry through artificial regulation.

And, uh, and, and that what he was explaining to me, which he would have to probably come on here and explain, cause I'm, I'm trying to get more out of 'em, but he's basically saying like, these, these companies, these finance, the people with the money, like don't want to invest in upkeeping and building more coal, um, because they'd make more money cuz they're limited on profits, right?

So they make more money just deploying the capital elsewhere. Elsewhere. And they're getting those carbon subsidies on top of that and they're, they're not limited on profit margin cuz it's not treated the same by the utilities. So there's, there's weird games going on like that. Um, but I, I do like what Pier did with the [01:11:00] troll and I, I think, uh, There's some room to talk about battery free.

Bitcoin mining

**Marty:** is, I haven't heard it yet and I love it. Yeah, Bitcoin is battery

**Steve:** free. It's battery free. And I mean a battery, like, is it battery? Does cost, it costs a lot of resources to make, like it really does. It's a hu Even if you say it's net benefit of, for the environment, you know, it doesn't matter.

It's, it's one less major component and Bitcoin mining doesn't need it. And that's really, really great. Um, cuz it, it's a huge resource cost not, not to deal with, right. Yeah. With an industrial Bitcoin mine.

**Marty:** Yeah. So are you optimistic that we can defeat the carbon hysterics in the narrative battle?

**Steve:** Uh, fiat has to collapse.

**Marty:** You think that's gonna happen?

**Steve:** Yes. Uh, of course I do. I think it's a matter of time. Uh, I just don't know when, um, it could be sort of sooner than we think and it's probably gonna be one of those things we look back and we don't know exactly when. Like, we're like, oh, it happened then. Yeah. But when it, when it's happening, we're not really sure.[01:12:00]

You know, I think it's gonna be weird like that, but I, I think the first signs are seeing, uh, you know, I don't, you know, not to go down this rabbit hole right now. Um, but like bricks and stuff, like, yeah, let's go down teaming up. Let's go down

**Marty:** it, dude.

**Steve:** Well, I don't know a lot about it, but I know, you know, I really don't know much about it at all.

Uh, but like, you know, when I said earlier, I, I, I, I believe I've said it a bunch, and I, I sort of hung my hat on the fact that, on the idea that, um, Bitcoin beyond, like, not just Bitcoin, but Bitcoin being a better money and a, the first competitor to fiat, that's not been quashed, right? Everything else has been stamped out, it existing, uh, merely.

And, and then also time itself, like the fiat ponzis, the pressure that's building for it to collapse combined. It's gonna happen probably within our lifetime. And what I think is gonna happen, I think it's gonna happen way sooner than. Anyone expects is like maybe the bricks organization, maybe. Maybe they'll go [01:13:00] to a, uh, a precious metal reserve.

Mm-hmm. I, again, I'm predicting a precious metal reserve. I don't, I don't believe governments like any of these big guys are gonna go with a Bitcoin reserve. I think they're gonna start with a precious metal reserve and Bitcoin's more of a money for the people. But I think that's gonna happen and that'd be a great thing cuz that's gonna be a signal for the collapse of the un reserve Fiat economy.

Yeah. And I'm rooting for it cuz I think it's, even though it's not as good as Bitcoin, it's way better than what we have. Yeah. And it and it hold, it holds them in check cuz they still have to have a bit of the reserve, you know, if not full reserve

**Marty:** then fractional. Yeah, I think I agree. I think it's gonna happen way faster than people expect.

I think it's happening right now. I think, like you said, I agree. Broadly speaking the world. We'll only look back in retrospect and be like, oh yeah, it was then. I think it's happening right now.

**Steve:** Yeah. They'll find something and say, that

**Marty:** was it. It'll be, we cut Russia off of Swift. I think that's what it's gonna be.

And then, yeah, you just have this slow matriculation of [01:14:00] time. You have Russia, China, it's funny cuz they, they keep going back and forth. They've made multiple statements. Now Saudi Arabia is in the mix, Iran's in the mix, Brazil's in the mix. Mexico's thinking about getting in the mix and initially they wanted to do like yuan slash gold slash ruble back currency, but now all these people are getting in the, the mix and it's like, can you really trust the people's back of China to operate the Yuan system appropriately?

Mm-hmm. Likewise, can you trust the Russian central bank to control rubles? Mm-hmm. Uh, uh, effectively, no. Like, like at the end of the day, these people are definitely sitting across the table from you. Like, Hey you, you're the enemy of my enemy. Like, let's team up. Mm-hmm. Um, but I don't trust you. And they will try to go to gold.

But again, I do think there's something about Bitcoin and it is. Once you use it, once you fucking send the Bitcoin around the world, like it is undeniably a step function improvement on gold. And I do think it's that that gold back reserve currency will be very short-lived if it even

**Steve:** happens. Yeah. I [01:15:00] see it as like they've, they've gone off the sound money standard so far and now there's been a new one introduced, right.

A better one that obsoleted their old one. The first natural step in my head is they're gonna, as things get weird for them, they have to retreat back and they'll go back a step towards some kind of precious metal reserve just to try to be competitive and, and to like, You know, whether that's introducing a whole new currency that has a reserve or whatever, however it happens, I don't know, I just don't feel like, you know, you, you do see a lot of Bitcoiners, like, Hey, the government's gonna adopt this and stuff, and you know, you see El Salvador and like, you know, semi do that kind of thing.

But these, these countries, like, there's that other one, Bahrain Rain or wherever, like some other smaller baton baton. Yeah. A lot of these countries though, like they don't control a money printer. Mm-hmm. And so it's not the same. Yeah. Um, but when you see a major money printing machine say, oh yeah, we're done with this and we're gonna go to Bitcoin standard, then I'll be okay.

I'll be, I'll be amazed. But if it happens, I think first they're gonna get torn down by the mob and then, [01:16:00] uh, their new, uh, state, whatever it is after the revolution, um, is gonna, maybe, maybe then they'll adopt some kind of Bitcoin thing. But again, I think bitcoin's more for people, like people will adopt it like you have, and I have, and most of your listeners have, and we're just gonna keep using it.

Uh, in parallel with other things. Like, I like gold. I, I I do, I got into Bitcoin through gold. I got some 24 Kara

**Marty:** Gold

**Steve:** right here. Yeah. I sympathize with Peter Schiff. You know, like, I like the guy cause he's just one of those guys stuck on his gold mantra. Right. He can't get off it. Yeah. He can't. Like it's his thing too, right?

He's probably doing it for fun. Yeah. But you know, guys, you know, people I sympathize with the gold lovers cuz that's how I even got into this space. I was like, I I we need a gold standard is what I was thinking back then until I learned about the Bitcoin standard. Right. Yeah. But I still buy a little bit of gold every year.

Um, cuz it's, I just think a good thing to stack, like use a shit winner. I'm a shit winner. Yeah. [01:17:00] It's, yeah. It's not, um, I do, I would say it won't perform like Bitcoin well over the long term, but it's still a good thing. Yeah. Like, I, I agree. I just look forward to when I've given it. You know, you, I I, you treat it like a rainy day thing.

Like I'm never selling it. I'm just stacking like one coin a year or something. I'm gonna give it to my kids, like it's gonna be fun. Yeah. Little, little bit of gold when I agree their inheritance, right? Yeah, I agree.

**Marty:** Um, yeah, I do, I do agree too that Bitcoin is better if it's adopted by individuals like ourselves first.

I think we take the opportunity here before we wrap up. It's getting loud out there. Pre-date vibes are rising right now. Steve came all the way from Canada, so I don't wanna hog you in this studio all

**Steve:** night. Hopefully I can put a coherent, uh, argument together. I'm like super rundown from traveling, so we'll see.

Well, I think it's gonna be broadcasted, so

**Marty:** I think you'll do a good job. Mm-hmm. Um, what was I gonna say? Oh yeah, let's just declare a Bitcoin standard. Like we're North [01:18:00] American Bitcoin standard. We don't even need to wait for the politicians. Just like we're on a Bitcoin standard now. Like let's just

**Steve:** do, oh, I agree.

I didn't, that's why I just don't. You, you don't see me out there. Um, like me personally, like actively, you know, supporting like, let's go talk to the politicians. Like, like go do what you want. Like I'm already working on it. Like I'm already on the standard. Yeah. Me personally, I am, my company is like, we trade ambi Bitcoin all the time.

Trade goods, like not trading, like trade goods. Like we buy stuff with Bitcoin, we accept Bitcoin and we manage Bitcoin and fiat treasuries. Like we're, we're already there. Like there's nothing left to wait for. Right. We just want more people to come so we get more trading partners. Yeah. And, and uh, more network effects.

So the value of our treasury goes up. That's really all I'm doing right now is just waiting for

that.

**Marty:** Yeah. Come join us. We do it here at tftc two. We have a Bitcoin treasury. You guys are sending

**Steve:** us sets. Say, say, so the, the Bitcoin commons, right? Like they, I, I said I want to pay for your food tonight.[01:19:00]

Like, I'll sponsor it. Just let me chill my product when I'm, you know, here. Right. And then like they sent me an invoice and it was fiat and I was like, no, send me Bitcoin invoice. Like, come on, come on. But I mean, they do it, of course they accept Bitcoin. Yeah. But it's, uh, yeah, I mean our invoices, we, we put in like accept Bitcoin as payment or whatever.

Yeah. Um, I think that's all that matters. Like all, all a person can do is accept Bitcoin as payment. You can't force anyone else. You can't, you can talk all day. It doesn't matter, uh, if you, if your business and your person will accept as payment, you're growing the network. That's more important than anything like running a node or any of the things people commonly say is just be willing to accept it when it's offered like at par value and you're doing your job.

I completely agree.

**Marty:** Yeah. And we accept Bitcoin here. If you wanna stream of stats while you're listening to this podcast, we'll take it at par. Value. We'll accept it, we'll give it back to others who accept it. It's the thing we're on a Bitcoin staring already freaks. Most people just don't know it yet.

**Steve:** [01:20:00] I, that's, that's where I'm at.

Yeah. Yeah. What's I, we don't need to wait for the lobbyists to get Washington on board or the, the Ottawa and Canada on board. Like, I couldn't care less. Like, I'm just hoping they don't stop, like, you know, make it hard cuz they can really make it hard for our businesses to operate. Like, like, uh, say like, you're not allowed or tax it disproportionately or something.

Right. Like, that can happen. That's the only thing I'm worried about is like the regs, the regulators are gonna just be mean to us. Don't be mean discriminatory towards

**Marty:** us. I should say. You guys are, you guys are all six inches away from the grave. Just go die and leave us alone. Die in peace. Is that too harsh to end it on?

You'll break a leg tonight.

**Steve:** Thanks man. I'll, let's end it on that too. Okay. Dying piece.

**Marty:** No, this's been awesome. Isn't the first time you've done this in person. Oh yeah, it is.

**Steve:** Yeah, yeah, yeah. We'll do this more.

**Marty:** You gotta go to Texas headquarters and come hang out in the commons. Working on it,

**Steve:** man. Okay.

Working on it. All

**Marty:** right. Anything you want to end? No, [01:21:00]

**Steve:** I'm good, man. All

**Marty:** right. Let's go debate. Let's do it. Peace and love freaks.