

TRANSCRIPT: Blockware Mining Inc. Presentation
Interim Joint Committee Economic Development & Workforce Investment
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Presentation on Cryptocurrency Mining

Presentors

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Recording

Link to presentation [here](#) (starts at 1:21:01)

Transcript

Speaker 1:

Next up, we have a presentation on cryptocurrency mining, so Bruce Wilcox, Michael Stoltzner and Jeremy Witten.

Bruce Wilcox:

All right, perfect. Good morning, Mr. [Wheeler 00:00:16] and members of the committee. I'm Bruce Wilcox, the President and Chief Executive Officer of Greater Paducah Economic Development. On behalf of my organization and our community, I thank you for the opportunity to speak with you this morning. We certainly appreciate your interest in understanding the impact that data center's data mining and digital currency is having on our economies.

Bruce Wilcox:

Most of you are aware and I think we all are that we in Kentucky are very fortunate and we're very blessed to have some of the most affordable power rates in the country and even the world. We have a very sophisticated, very reliable utility infrastructure. Particularly, in our far Western portion of the state, we are right in the heart or the center of the MISO grid. The MISO grid is a network of electric providers that runs all the way from Canada all the way down to the Gulf. There are a lot of transmission lines that intersect right in far Western Kentucky.

Bruce Wilcox:

So, that is one of the drivers of interest in putting cryptocurrency and large consumers of electricity in our area. We applaud you also for the recently enacted legislation that abated the sales and utility gross receipt tax on electric bills. Affordable power rates and the abatement of these taxes has driven a lot of interest in cryptocurrency mining because they are large consumers of electricity. We've seen electricity or crypto inquiries from the east coast of New York all the way across to California, up into Canada. I've talked about crypto interest in China, even in Greece.

Bruce Wilcox:

About a year, a year and a half ago, we developed a relationship with Jeremy Witten to my right. Jeremy was with Navier at the time, which is a consultant that manages the construction of the crypto sites, and it has an operating software that manages the back end once the center is operational. So, there began our relationship with the crypto industry. Since then, over the past year, we've secured two different crypto projects, one of them being Blockware with Mike Stoltzner here with us.

Bruce Wilcox:

He's the Chief Executive Officer with Blockware. Upon completion, there are a couple of phases to Blockware's project. The first phase is a 30 megawatt project. We certainly hope to be able to entice them to put an additional 30 megawatts there to get them up to the 60 megawatt project that we're looking to secure. That will end up being about a 50 million dollar project, and we believe it will ultimately result in hiring 20 full-time employees. We also have another unannounced project of another crypto project that is in our community that has multiple locations.

Bruce Wilcox:

When it's all said and done, it will be about a 15-megawatt consumer of electricity, about a 15 million dollar capital investment and about five employees. We've had a lot of significant interest from other crypto companies ranging anywhere from 10 to 100 megawatts, and there continues to be a lot of interest coming from China and from private equity monies. Most of you are aware that China has outlawed or doesn't allow cryptocurrency Bitcoin mining in China. So all of the miners there, they're looking for a home. They're looking somewhere to place their machines immediately.

Bruce Wilcox:

And then we're all aware of how private equity works. Private equity's interested in getting an immediate return on their investments. So, therein lies the interest of placing these machines as quickly as possible. That process involves a matching process. We have to identify existing locations or existing pockets of underutilized power, where there's excess megawatt capacity around substations, and then we have to acquire land that's in close proximity to these substations. That's what we were able to do with Blockware.

Bruce Wilcox:

We have an industrial development park called Industrial Park West. It's right off I-24. We were able to work out an arrangement with Blockware Mining with Big Rivers Electric through Jackson Purchase Energy being intricately involved to where Big Rivers Electric is investing almost 13 million dollars in utility infrastructure upgrades to Industrial Park West to increase the megawatt capacity to a 100 megawatts. This has also led into additional opportunities for Paducah Power, Big Rivers infrastructure.

Bruce Wilcox:

Investment is going to take 18 to 24 months, so that's led into some other opportunities with Paducah Power as well. When you sit back and ask, why is cryptocurrency or data mining, digital currency, why is it good for our community? It's good for the consumer and the power companies. Number one, I think it's prudent for us to realize that I can speak for Big Rivers Electric and Paducah Power, our utility companies are solid. They're funded well. All of these crypto deals that they're doing, they're collateralized. In all instances, they're having to put up two to three months worth of deposits for electric bills.

Bruce Wilcox:

Crypto is an unregulated currency, so you can't go out and get a letter of credit. They're actually having to put up cash. Most all of these deals are cash collateralized from the exposure that could be from the electric bills for two to three months, as well as the infrastructure that's being built to accommodate that. As the power companies are able to sell more megawatts, that enables them to produce more electricity and it allows them to spread those costs out over more megawatts. In theory, just like in business, you have fixed cost to operate your business. It costs \$100 to operate your business, whether you have one customer or 100.

Bruce Wilcox:

As you're able to bring more customers on board, it reduces your fixed cost per customer. Over time, what we believe that we will see as these power companies embrace and engage with more crypto companies, we'll see the fixed cost charge per customer actually decline. It will also generate additional cash flow for future investment into our utility infrastructure, and it will enable our power companies to service and manage their debt appropriately. So, we're excited about having Blockware in our community.

Bruce Wilcox:

We anticipate the recurring annual economic benefit for our community to be around \$3 million dollars a year from these guys. They've been wonderful partners with us. I'll turn things over to Mike. Now, Mike's the CEO of Blockware, and he can share a little bit more with you.

Michael Stoltzner:

Hello. Thank you, Mr. Wheeler and the committee for inviting me to speak.

Bruce Wilcox:

I think your microphone [inaudible 00:07:48].

Michael Stoltzner:

I think, am I on here? You got me now? Okay. I need to lean forward. I had back surgery a couple weeks ago, so I have a tendency to lean back. But thank you for inviting me to speak before you and tell you a little bit about Blockware. I had put it together... My team had put together this little handout which I thought would be helpful to whomever would be interested in looking through it. It's a little bit of a Bitcoin mining 101, so a good review.

Michael Stoltzner:

But as far as I think what this committee would like to hear is really how the economic development and the workforce investment that we're putting into the community. I'd like to cover that and give you a very brief background. About a year and a half ago, we began our search for a location to build our first mining facility. A mining facility is essentially a data center. It's a structure that's housed with thousands of servers. We started looking about that. We went through Alabama, Tennessee, Kentucky, Illinois, and numerous states.

Michael Stoltzner:

We then were introduced to Bruce and GPED, and they held our hands and took us through the process of showing us some sites around Kentucky and Greater Paducah area and introduced us to the proper people to start the process of applying for our [KBI 00:09:35], which we did do that. We were granted back in January. And also with Big River, we signed a PPI with them back last April for a 10-year purchase. Our first phase, which is a 30 megawatt facility for the servers that will fill that, which are approximately 9,900 servers and the build out of the building at current cost is about 100 million dollar investment for that first phase.

Michael Stoltzner:

The second phase per the agreement with Big River will begin in June of 2023. Actually, Senator Wheeler, hitting on a point that you had questioned, I believe the gentleman that spoke last, Bitcoin mining and what we do is actually bringing industry back to the Midwest, back to areas of the country that had lost the steel mills and the industry of the early 1900s or the 1900s. A lot of the facilities that are being used for mining facilities are old mills that have been shut down from Kentucky to East Chicago and so forth. We've always gone by a slogan that we're bringing hash rate to the United States.

Michael Stoltzner:

A year ago, China controlled 65% of the hash rate in the world. The United States was 7%. Today, the United States is 19% and growing. So, we feel that we are bringing industry back to the United States. Now to concentrate on the workforce investment, we started our project. We broke ground on our project in... What was it? Maybe July. In July, we broke ground. We're pouring the slab for the building. The building has been delivered. It will begin to be erected next month. We hope to begin to load our first mining rigs, our first couple megawatts in the structure by the end of November.

Michael Stoltzner:

We have already started a hiring process where we currently have four full-time employees, all Paducah residents. We have two others starting the first of next month. We have two others that are reviewing contracts that are high level jobs. In this case and the people I laid out, two of them are... They don't have college education or a community college education, but the jobs that we're paying them are \$18 an hour to start with full medical benefits and [crosstalk 00:13:10]-

Michael Stoltzner:

Pardon me? On the higher end of that, we have numerous jobs that are [inaudible 00:13:21] that are in the 70,000 plus area of income with full benefits. You'll see by going through the handout I have that Kentucky currently is the second largest Bitcoin mining state in the country with Texas making a major move. So, I think that sums up most of what I wanted to say on what we're doing in Kentucky and the bright future that we see for our business in Kentucky. We are currently... Jeremy will hit on a couple of things that we're working on a handful of other projects within the state. Thank you.

Speaker 1:

Thank you very much. We have a question from the Co chair [Schroder 00:14:19].

Schroder:

Thank you, Mr. Chair and I thank our [inaudible 00:14:25] for their attendance and testimonials. They apologize they can't be there in person. Part of the reason I really wanted this on the agenda is we've heard how Kentucky nationally has gained a good reputation for mining companies, but it seems like when I talk to people in economic development across the state and different utility companies, there's still a bit of skepticism with the industry.

Schroder:

So, I'll appreciate hearing from our witnesses and hopefully we can continue to show people how beneficial these companies can be for the commonwealth. I have a question for Bruce and then for Michael and Jeremy. But first to Bruce, what can we do for your counterparts across the state, maybe to help them see the value that you've been able to see in the Paducah area?

Bruce Wilcox:

Sure. When I look at any economic deal, I spent almost 30 years in private industry. I'm a CPA by trade, and I've been the CFO and then the President of two different companies. So, I always look at an economic deal of managing risk and from both sides, from the economic development side and, excuse me, the company side. When I look at these deals, I go back again, these deals are cash collateralized. From a risk perspective, there's very little risk from the utility company's side of things.

Bruce Wilcox:

We've seen a push towards green energy, particularly with solar. We all know that the battery storage and the battery capacity for solar, it's not there. But if we keep moving in that direction,

that's going to disincentivize fossil fuel facilities and power plants that produce electricity with fossil fuels. The thing about this is this increases the base load for power plants. It gets it up to X. One of the good things about every crypto company that I've talked to, when you do a power purchase agreement, you can do an interruptible power agreement or a non interruptible power agreement.

Bruce Wilcox:

Most of them will choose the interruptible power rate because it's less expensive. If you get into a situation where you have... Take Big Rivers for instance. Long-term, I think their goal is to have a third coal, a third gas and a third green energy. So, if we enter into a position to where the solar, it's raining or it's dark or whatever or a heat summer, a very cold streak like we had down in Texas this past year, the power company can go back to the cryptos company and say, "We need to idle your machine down."

Bruce Wilcox:

They can idle these machines down in a matter of minutes and reduce their consumption. Back to the power company, you have a base load of X. You can power the crypto companies down, but then you can power it back up to what the consumers has. So, we've seen a win-win situation from both sides.

Michael Stoltzner:

If I could add one point, and that energy can't be stored. It's not like oil, you can put it in a tank and save it and use it tomorrow or next week or next year. It's gone. So, what crypto miners do is actually bring down the cost and exposure to the utility companies, because we even them out. When they have excess load, we're talking. When they need to load on a hot summer day, we're pulling back, so we even load.

Michael Stoltzner:

One other thing to go with that, you will hear the argument, will crypto mining, Bitcoin mining waste energy? Bitcoin mining worldwide uses one-tenth of 1% of the disposable energy. The same amount of energy that's used to run a cruise line runs the entire Bitcoin network. There's some fallacies around energy use.

Senator Mills.

Senator Mills:

Thank you gentlemen for being here today. A couple questions here. I'm struggling. The last six or seven months, my son has been mining Ethereum, if you know what that is and he's really big into learning about blockchain technology and has invested in some others. He keeps on trying to drag me along, and I keep on asking for an explanation. So, your primer is going to be really good. On the way home, I can read this. But just a couple of things.

Senator Mills.

Senator Mills:

How often does your company recognize your profits in US dollars? That's one of the questions about the profitability of mining companies keeping their profits in Bitcoin, and when do they realize their profits? How do you do that?

Michael Stoltzner:

It is obviously all a corporate strategy, and different people have different strategies. I will tell you from our beginning and we began in 2019, we went to US dollars typically if it were not daily, within every three days, because we used the income that we earned for mining to buy more miners to build up. For instance, the facility that we're building in Paducah, we are 100% out of pocket. We went to every single state in the Greater Paducah area to get financing even to build the building, and we couldn't get financing.

Michael Stoltzner:

For instance, the facility that we're building in Paducah, we are 100% out of pocket. We went to every single bank in the Greater Paducah area to get financing even to build the building, and we couldn't get financing. So, we have rolled back our mining rewards into that. Now, we do. As we've grown, we carry a small treasury of Bitcoin. In time, we will carry a larger treasury Bitcoin. But be it an individual that's trading for their own account or be it a business, it's a board type decision and how you want to allocate that.

Senator Mills:

Okay. A couple other questions here. The legislation we passed last year, I can't remember what the type of the investment or the dollar amount was, but it's basically targeted to larger mining companies. I've had a couple people reach out to me, and you may know who they are in the Paducah area that have some smaller mining interests. I believe these community ventures have some smaller mining interests that are interested in the abatement of the sales tax. Do you see that as a positive economic development tool if we were to abate that to smaller organizations that are just starting out with say 50 to 100 machines?

Bruce Wilcox:

Again, I think it's been one of the things that's put us on the map worldwide. I would add, when you look at your electric bill, there's a 6% sales tax on the electrical consumption, and then there's a 3% utility gross receipts tax, so it also abated that as well. It's not uncommon for one of these larger companies to have a power bill of a half million dollars a month or greater. So-

Michael Stoltzner:

Greater.

Bruce Wilcox:

... you do the math. 9% adds up pretty quickly. So, I think those same economics certainly would benefit a smaller miner as well.

Michael Stoltzner:

And then what we do, we accommodate the smaller miners. We're seeing in our facility. That's not all 30 megawatts that's mining for our own account and our own business. We may have someone like your son that has five or ten miners that he wants to host with us. He has it in a secure environment with 24/7 security and monitoring, and he pays the fee for electricity. It's really quite an interesting process. You put your servers in there. You have what's called a wallet, and your mining rewards each day get deposited in that wallet, and you see them daily. So, we provide that service to smaller miners.

Senator Mills:

Interesting. And then my final question is, all the miners that were in China that were shut down, are they actually moving the equipment to the US or are they just purchasing new equipment?

Michael Stoltzner:

They've moved a lot of equipment here. Not as much as the US. A lot of the Chinese equipment has been moved to other parts of Asia and to Eastern Europe. To a large degree, the Chinese miners that are coming here are buying new equipment.

Senator Mills:

Okay. Bitcoin is at the highest it has ever been, right?

Michael Stoltzner:

Yeah. Yesterday-

Senator Mills:

[crosstalk 00:24:25] 65,000?

Michael Stoltzner:

... it traded 67,000 yesterday, which the prior high was I want to say 64,750.

Senator Mills:

Thank you for your testimony.

Michael Stoltzner:

Thank you.

Speaker 1:

Senator Banta

Speaker 4:

Senator Banta.

Michael Stoltzner:

Thank you

Speaker 1:

Senator Banta.

Senator Banta:

Yes, and please forgive my... I'm kind of naive about this, but I find it interesting. I know Hawaii shut it down. I know you don't have the federal regulations yet. What keeps me from being a huge cartel drug dealer and laundering all my money through Bitcoin?

Michael Stoltzner:

Well, honestly, I don't see that laundering money through Bitcoin or any other process. Really, if you look at the facts, there are far more money laundered through banks, foreign banks than there are through the Bitcoin network. So, I just don't see that as an easy means of laundering money. Jeremy, maybe you can address that more. He's the engineer in the group.

Jeremy Witten:

What's interesting is when you think Bitcoin, you think the wallet, you think everything's anonymous. Whereas the wallet is actually pseudonymous. You can actually track. It's a public ledger, so you can actually see the transactions where they go by just accessing publicly. Whereas any other process, you'd have to access those documents. You have to apply. You have to talk with the banks in other countries. Whereas the wallet, from the standpoint of the following, if you do suspect where there's something going on, you can track where that wallet, where it's in, where it's being either paid or distributed to from there. From a network point of view, it's actually more transparent than current systems in that aspect.

Michael Stoltzner:

And once recorded, it's there forever. Once the block, which in the term blockchain, every transaction is verified by a block, it's in history forever. If you were talking about Ethereum, which is another second largest token, you could go into the Ethereum ledger and you can pull up and see the activity that... I could see the activity that Jeremy has done. Every transaction has to pass through that ledger.

Senator Banta:

But do we care? I mean, is anybody looking at that?

Michael Stoltzner:

There's people that study it pretty hard to figure out. The reason they study it pretty hard is because they want to know when the big... Everyone knows who's the biggest holder of say Bitcoin or Ethereum, and they watch to see when they're buying or they're selling. Because if they're selling and they're the largest holder, conventional wisdom says the market's probably going into a down cycle. So, yes, people do follow it quite closely.

Member of Committee

Okay. We have representative Lockett

Rep Lockett:

Yes. Thank you, Mr. Chairman. I first want to say thank you for your presentation. My dad actually retired from Paducah Power, and so it's certainly a pleasure to see that they are working with you as well. My question is, my other job is as I work as a financial advisor, and there is not one major company to my knowledge that will sell their clients' Bitcoin. I can't. I'm in fact absolutely forbidden in the company that I work for. As you probably know, Bitcoin is considered very speculative, and so therefore there is not a company that will sell it to their clients because of that reason. My question is, what would you say to that first of all? And second of all, what would you give to a company in terms of a reassurance that, yes, this is something that you should or could offer to your clients?

Michael Stoltzner:

If I'm not mistaken, within the last 30 to 60 days, Goldman Sachs, Chase, Morgan Stanley have all now offered Bitcoin to their clients, and the first ETF started trading Tuesday on Bitcoin, which is an SEC approved product.

Rep Lockett:

So, how would you... If you were making a presentation to say Edward Jones, how would you describe it to them? And therefore in terms of individuals, how would you tell them or describe to them the process that they could have assurance and I guess us here too as well, have assurance that Bitcoin is something that, one, is going to be around for a long time, but two, is something that is backed up by something that can hold it stable?

Michael Stoltzner:

I think that it has been proven, and there's two uses of Bitcoin or any other cryptocurrency, but Bitcoin specifically. You hear the term digital gold. Bitcoin in a lot of ways is taking the place of gold as an inflation hedge. I know within our company when we did a capital appraisal, we have a number of large investors that are older people that were as you refer to gold bugs. They've been gold investors their whole life, and they have made the move into Bitcoin as their digital gold. Bitcoin has two uses. The digital gold, which is the inflation hedge and the buy-in hole. Also all the different projects that are being done. And in time, just like the internet in 1994 was new to all of us, the internet as we know it today won't exist in a handful of years, in five to ten years. The whole internet will be based upon a decentralized platform, which will be done upon blockchain. I'm not saying it's going to be done on Bitcoin or Ether. I don't know where it will be, but it will be based upon a blockchain.

Jeremy Witten:

All I can add is really from just more of a personal story, because a lot of... When I was introduced to Bitcoin four or five years ago, I went through the same process learning where you all are asking now. And coming out of primary industry in the alloy industry, I would have never dreamed being introduced to Bitcoin in the process that it does. But through learning and seeing the application and seeing how the industry has evolved and how it has a mutual benefit to the utility industry, the power industry, the value, that's where I see the value. And as the future

progresses, the value will continue to increase based on the use. Not just the existing use cases, but the future use cases. Because from the standpoint of, when I look at the value and I look at Kentucky, I'm born and raised here. Kentucky is centrally located in the hub of all the industry both with the 60, 65 quarter, 75 and 24. Over the years, we've lost a lot of heavy industry and have a lot of jobs that come with it, but we also have an opportunity to harness this industry and establish basically a technology hub for this industry because of Kentucky. People don't know, Kentucky has access to three different independent system operators: MISO, PJM, and then the Southeast TVA. There's not another state that has three. From a diversity, Kentucky offers very diverse opportunities to go around the state and benefit both at large and small communities. So, the value, and back to the investment part that I see that every investment that you have always comes with a risk. It's, how can you understand? Because most of the time, when people go to a typical investor, do you really know what the...

Jeremy Witten:

Do you trust what they put in front of you? If you look at the history, this is how it's performed, so we trust that. And so, you want to do the same thing. When you look at Bitcoin or cryptocurrencies, there's a history to go off of and you want to look at that, but you also want to understand how the industry works just like the typical stocks. How does the company work? What are they providing? What's the problem that they're solving. In the case of the application of Bitcoin and mining, mining from the standpoint of it creates value by creating new Bitcoin and also verifying the network. You're getting block rewards based on the transactions that are approved and verified.

Michael Stoltzner:

One quick thing to add on a personal basis because I'm older than most of the miners out there, and so I got introduced to it late in life. But I spent 34 years being the managing partner of one of the largest proprietary trading companies in the world, which is a very highly regulated business. We had to file a Focus Report with the SEC every morning by 9:00, same with the NASD and so forth. I come from a very regulated background, and one of the things that we have done with Blockware Mining since day one is try to bring that thought process, those practices to our business.

Michael Stoltzner:

We look forward to the regulation of the industry. The regulation of the industry will only help us, not hurt us. There have been many bad actors through the years, just like there's bad actors in many things and many things that are new and pop up being on the internet, whatever. We embrace the change in regulations that are coming.

Member of the Committee

Thank you. We have a final follow-up question from Co chair Schroder.

Schroder:

My comment and question to Michael and Jeremy, first of all, thank you for investing in Kentucky. Michael, you had mentioned Texas, and that seems consistent with all the news out there. It seems like Kentucky is second to Texas. I was wondering in your experience of

choosing Kentucky if there's anything that we can do that would make it even more attractive for other companies.

Michael Stoltzner:

You know what? Everything we did, and again thanks to Bruce Wilcox and GPED that really held our hand and took us through the land purchase, the KBI process, everything. The hardest process we've found was dealing with the utility companies and coming to an understanding with them. And then the final review of going before... What was the...

Jeremy Witten:

The PS, Public Service. Public Service Committee.

Michael Stoltzner:

Yeah, before going before the public service committee. It was a lengthy process. If it were possible to shorten that process, it would be of help.