



ceocfointerviews.com

© All rights reserved

Issue: June 27, 2022

Bion Environmental Technologies – bringing to market technology enables Beef Producers to turn their Waste Stream into an Income Stream



Bill O'Neill
CEO

Bion Environmental Technologies, Inc.
(OTC QB: BNET)

Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine

CEOCFO: *Mr. O'Neill, what is the overall vision behind Bion Environmental Technologies, Inc? What are you focusing on right now?*

Mr. O'Neill: Lynn, the overall vision is to help products made from livestock, in general, to be more sustainable and more profitable. Right now, or focus is really on beef and beef production, and trying to find partners who share our commitment to sustainability and all that it means to the environment and climate, and all of that.

CEOCFO: *What is wrong with the way beef is produced today? Would you give us some of the issues and some of the potential solutions?*

Mr. O'Neill: The way beef is produced today is just by and large the way it has been produced forever, or at least in my lifetime, which is way too long. If you follow the value chain of producing beef, you basically start with a cow/calf operation. You have got a farmer who has cows, and they have calves, and then the calf hangs out there with its mother until it is weaned, probably 9 months later. Then it gets moved into a grazing phase, what the industry calls a stoker phase. Then it gets moved after about 12 to 18 months into what they call "finishing." The finishing phase is the phase that Bion is really focused on. Finishing, Lynn, is the nice term for the feed lot, or what many folks refer to as CAFO, confined animal feeding, where, in the beef industry anyway, you get thousands of animals that are confined in a spot, and they are really focused on feeding those animals to have them gain weight as quickly as possible, so that they can then be taken to harvest and meat generated from the animals.

Again, that is the way that it has been done for a long time. The problem you have with it, or the challenge that the beef industry has today, is that you have got all the environmental issues associated with having, in this case, lots of cattle herded into a specific area. With those cattle, unfortunately, comes a lot of waste. Think about it this way. A beef cow produces, 50 lbs of poop every day or the equivalent of 33 people. Can you imagine creating a town where you have got 100 thousand cattle, which is the equivalent of say, over three million people, and not having a waste treatment plant in that town, that would not be what we would want to have happen. That is basically what has happened in the beef industry over the years. Now again, 100 thousand head is a lot, but there are a lot of those, but you have got anywhere from 5,000 head, which is the equivalent of 150,000 people, up to 10,000 head and 15,000 and so on and so forth.

What Bion has done is created a technology that remediates the waste, it removes the environmental impact of that waste in that area. As importantly, it keeps that from getting to the water in that area as well.

CEOCFO: *What do they do with the waste now?*

Mr. O'Neill: By and large, it gets pumped into lagoons, and some of those lagoons are covered because so much of that ammonia nitrate, and so forth, escapes to the air, which again is a big part of the greenhouse gas problem that we have and that everyone in the world is saying that they want to diminish and try and control, in trying to help our climate change situation. However again, today what happens is that waste is basically pumped into a lagoon and held until evaporation takes place. Then, it would get spread out over the surrounding land.



[SafeRX Pharmaceuticals](#)

CEOCFO: *Are beef producers looking for a better way? Are they recognizing the problem? Where does it stand in general in the industry?*

Mr. O'Neill: If you were to take a scan of all the major beef producers in our country, in the US, and go look at their websites, every one of them expresses an incredible commitment to sustainability. Several years ago, the consumer got wind of sustainability, and is all about it and wants it. Again, in 2021, consumers spent 150 billion dollars for products that were labeled as sustainable, and 70% of those consumers say that they are willing to pay a premium for a like product if it is indeed made sustainably.

Get back to those websites of all the major beef producers, and meat producers in general, and you will find major commitments to it. However, what you will not find is that there is no mention of the feed lot, of the CAFO, in any of their websites of any of their information. That is primarily because they all basically have sold off those operations to a third party, so they are not having to talk about those things, but still all the cattle that are processed through their plants, and all the meat that is produced from those cattle, all have to go through a CAFO at some point. That is the point that Bion is really focused on.

"If you are really trying to make sustainable beef, then you need to deal with that CAFO, and Bion makes that possible." Bill O'Neill

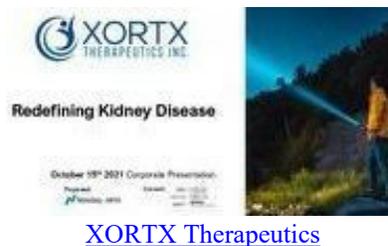
We focus on creating this technology that can truly refine this waste stream, and instead of just trying to keep it out of polluting the land, or the air, of the water, we actually turn that waste stream into an income stream, and actually make money, and make a lot of money for those involved with it.

CEOCFO: *How?*

Mr. O'Neill: You basically refine that waste stream into its components. You start with the methane and the ammonia that we talked about earlier. We start by siphoning off that methane, and you then sell that methane off to the market as a biogas that can be used to replace diesel. Folks in California and so on are paying a lot of money for that type of gas. The next stage is that you separate the nitrogen out of that waste stream, and with Bion patented technology, you combine that nitrogen with CO₂, and we now create ammonium bicarbonate, which is a great organic fertilizer.

If you are following the headlines recently, as recent as last week, in the New York Times or Wall Street Journal, or any of that; fertilizer, for the lack thereof, is a really big deal, especially with the conflict or war in Ukraine, because so much of our fertilizer comes from that region between Russia and Ukraine. Therefore, it is a really big deal, and again, the market for that is really incredible. Then, you take 30% of that waste stream, and you clean it, and you create clean water that can be reused in whatever way you want.

From my perspective, lots of folks today talk about carbon and carbon credits and all of that, and I agree that I think that is a really big deal, and I think it is going to be a really valuable part of what Bion can do. However, I really think that water is the bigger deal, and I really think that when you can take this waste stream and generate or convert, transform 30% of it into clean water, I think that is a really important piece to what we are doing. On the whole, we take that waste stream, which is a real negative, turn it into a positive, keep it out of the environment, and create income streams from the various products from it.



XORTX Therapeutics

CEO CFO: *Is the system in use today?*

Mr. O'Neill: The system has been in use, and in Lancaster County, Pennsylvania, Kreider Farms was the first example of the first model that Bion put together. Then, subsequently we have tested, and we are really trying to create this new technology, this third-generation technology, which for me Lynn, is the aha moment. It is the moment that Bion and the engineers and so forth said, "Wow, if we combine this with this, now we have an organic nitrogen that we can sell to the market, and this thing can really start to make significant dollars, significant money for the people involved in it." That Kreider facility in Lancaster County, Pennsylvania.

We had focused on beef in our lines and development, but everything though, until now, had been in dairy. Now, we are basically looking at putting our first beef facility up. It will be at Fair Oaks in Indiana, and that should be operational, hopefully, by the end of this year. That will have proved the technology addition that I have been talking about, and that will really help verify all of the model numbers and projections and estimates that we have been talking to potential customers and partners about.

CEO CFO: *What is involved in an implementation?*

Mr. O'Neill: There is a lot involved in it. First, you need to find a willing partner, not someone who says that they want to be sustainable, indeed truly wants to be sustainable. Again, if you look into some of these websites, you will find that there are some huge claims out there, that companies will be the most sustainable company in the world, or the most sustainable protein company in the world. Yet, when I am talking with those types of customers, they say, "We really want to be sustainable, but that is a lot of money." It is a major CapEx expenditure to implement the Bion system. You are probably looking at about 35 million dollars to install one of these systems.

The systems entail taking the feed lot, which is an outdoor experience today, and moving those cattle indoors into barns, with slotted floors, so that you can collect that waste as it happens. Much of that waste happens when the cattle are feeding, but obviously it can happen at any time. Therefore, the key for us is to collect that waste as soon as possible, and to get it to work in our systems, so that we can keep the ammonia and the methane from escaping to the air in the form of greenhouse gasses, but then also start working on the rest of it, so that we can go ahead and refine that and then enter the various components. It is an easy concept to understand.

CEOCFO: *Would an organization convert their whole facility? Would they start with a pilot project? How do you get a foot in the door to even explain what you offer?*

Mr. O'Neill: It really depends on the organization, whether it would be a full-fledged deal, or whether it would be a pilot, as you suggest, or talk about. The key is finding those companies who really do talk a lot about being sustainable. There is a company near Toronto in Canada, that is called Maple Leaf Foods, and Michael McCain is the CEO of Maple Leaf, and I saw that just last week he announced his retirement. However, he is truly committed to that organization being the most sustainable protein company in the world.

He really is putting his money where his mouth is, when you look at what they are doing and the kind of commitment that they are making. That is a pork program, with lots of pigs and they also are in the poultry business as well. However, our interest there would probably be more where pork is concerned, but it is just purely trying to reach out and let folks know what Bion Technology is.

CEOCFO: *What has changed in your approach from your original concept to where you are today? What have you learned as you have been developing and as someone like Kreider has been using your system?*

Mr. O'Neill: What has changed is that originally, maybe 10 years ago, Bion was really focused on creating a solution that the government, that the states policy would want to deploy. For example, we were talking about Pennsylvania with Kreider Farms; the Chesapeake Bay is critical to that area, and the effect of agriculture flowing into that bay really created major dead zones and problems, especially if you are talking dairies and the phosphorous that is associated with dairy waste. That was really the focus of Bion; to work with states like Pennsylvania to create a solution, because it is so much less expensive to work on the problem up front before it hits the land and flows into the stream, and then downstream into the lake, and then into the Chesapeake Bay. Once it is in the bay, now it is going to basically cost a fortune to get it out. However, if you can keep it from ever starting that flow, it just makes a ton of sense, and it is much less expensive to do it up front, even if we are talking about a 30-million-dollar CapEx. That is nothing compared to what it is going to cost as it flows downstream.

The last number I saw was that the US spends something like \$120 billion dollars a year on clean water, something crazy like that. However, I mentioned this before, in approximately 2015/2016, when the guys came up with this way of creating this ammonium bicarbonate in the system, that was the aha moment that I referenced, that you could really see, not just the biogas coming off in the form of methane, but that you would have another product to sell to the agriculture market, that could really generate some great income. That is because you need to offset that CapEx expenditure, and having that methane and biogas, being able to take that to market and combining that now with the ammonium bicarbonate that is coming off, that generates such income that we are talking about being able to pay off that CapEx expenditure within 3 years. That is our estimate. As soon as Fair Oaks is up and running, we will verify that and then hopefully have several potential partners to go to work on these projects.

CEOCFO: *Is the investment community paying attention to Bion? Do they recognize what you are doing, what you can do?*

Mr. O'Neill: Yes, I think that they are paying attention. Craig Scott, who heads up that investor relations board for Bion, would tell you that up until the last couple of years, he was pretty lonely when he would go to investor functions, and that suddenly, he has become a pretty popular individual at those functions. When he walks in to give his presentation, the room is full, versus just a couple of investors who were giving him their ear a few years ago.

I think the investment community is definitely interested. The key is that the results from Bion system are real, they are verifiable, that it is not just greenwashing like it is such a big deal within the corporate environment and so many companies are making claims that, quite frankly, they do not produce, and they cannot live up to. Therefore, I think that

once the investors realize that Bion is the real deal, they will really embrace what we bring to the party, because if you are really trying to make sustainable beef, then you need to deal with that CAFO, and Bion makes that possible.