# **SM119 | 4.29.2023 Carbon Frontiers | Episode 10** John Dowd, CEO, GoGreen Investments

We continue our Carbon Frontiers series this week with John Dowd. John is the CEO of GoGreen Investments, a Special Purpose Acquisition Company helping private companies working on solutions to climate change raise funds on Wall Street. Before joining GoGreen, John managed multi-billion dollar portfolios at Fidelity Investments and co-led the Fidelity Energy Research Team.

SmarterMarkets<sup>™</sup> host David Greely sits down with John to discuss how to successfully and responsibly invest in the energy transition. David and John also explore GoGreen's investment in mining the battery metals needed to decarbonize our energy system.

# John Dowd (00s):

SMARTER MARKETS

So the biggest misconception is that we can do this without mining, right? The biggest misconception is that mining is not good for the environment. Now, I'll be the first to admit that the mining industry needs to reinvent itself and reinvent the way they do mining in order to help out the local population in order to help out society in order to help out the environment. That said, it's a necessity to go forward and to invest in ways to reinvent mining in order to progress the clean energy revolution.

# Announcer (28s):

Welcome to SmarterMarkets, a weekly podcast featuring the icons and entrepreneurs of technology, commodities, and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together we examine the questions are we facing a crisis of information or a crisis of trust and will building Smarter Markets be the antidote?

This episode is brought to you in part by Base Carbon, it's time to get serious on carbon. Learn more at basecarbon.com.

# David Greely (01m 07s):

Welcome back to Carbon Frontiers on SmarterMarkets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is John Dowd. John is the CEO of GoGreen Investments, a special purpose acquisition company helping private companies working on solutions to climate change, raise funding on Wall Street. Before joining GoGreen John managed multi-billion dollar portfolios at Fidelity Investments and co-led the Fidelity Energy Research team. We'll be discussing how to invest successfully and responsibly in the energy transition and about GoGreen's investment in mining the battery metals needed to decarbonize our energy system. Hello John, welcome to SmarterMarkets.

# **John Dowd** (01m 48s):

Thank you. Great to be here.

# David Greely (01m 50s):

Well it's a real pleasure to talk with you today. A lot of what we've talked about on this series is about how critical it is to find ways to move investment dollars to high quality projects that push the energy transition forward and address the problem of climate change and I've been looking forward to talking with you about your approach to this. GoGreen Investments was created to help private companies working on solutions to climate change, raise funding on Wall Street and so I was hoping to start off today to get your sense of what are the big obstacles you see facing these companies as they seek funding, and how are you looking to help them?

# John Dowd (02m 27s):

So I think there are a couple of big problems. The first is finding something that you're able to fund that is not easy to fund, right. Important is that it not be too crowded. You know, you don't want to be the 10<sup>th</sup> company in a space to go public and try and raise money. And ironically, if it's easy to raise money for a space, you probably don't want to be putting money there. So it's a beautiful challenge, right? How do you find a company that is doing something that is absolutely necessary that Wall Street just doesn't quite appreciate yet, by definition that's where the upside comes from and you're, you're looking for a company that has a great solution,

PODCAST TRANSCRIPT

has a great management team, has a great valuation that's difficult to raise money for because those are the best investments. That's what you're looking for.

# David Greely (03m 13s):

SMARTER MARKETS

Absolutely, obstacles often create the best investment opportunities and you've spent a career investing in energy in the natural resource sector and so I was curious, can you take your career and use that to put into context, put into perspective the type and scale of the investment opportunity that you see being created by the energy transition now?

#### John Dowd (03m 35s):

I think it's bigger than anything I've been a part of so far. The different investment banks have come out with estimates that are in the trillion dollar range. What society is trying to do is epic, it's transformative, and we're trying to do it in a very, very quick timetable. So it's difficult to overstate the magnitude of work and investment and energy and effort that needs to go into this. You know, I've been, I've been through a lot of different energy cycles and economic cycles and commodity cycles and for most of those we were trying to add supply and we were trying to do more of something that we'd done before. Now we're trying to add supply in a space where we haven't actually done it before. You know, society hasn't built, to my knowledge, it hasn't built a town fully powered by solar and wind.

#### John Dowd (04m 28s):

We haven't found, if you ignore or if you move away from hydro as a storage solution, we haven't found an economic storage solution that's capable of providing and storing the energy for an entire town to survive through periods of intermittency with wind and solar. Yet we're trying to do this for the entire world, right. So this is no small feat. This is a laudable goal. We all understand the risks of climate change to our, our countries, to our way of life, to society. How we're going to fix this is not yet in stone. So that's the challenge, right. This takes a massive refocus of everybody to conserving energy, to producing energy in a cleaner manner, to storing energy. It's a wholesale shift. This is not similar to the 70s or 80s when it was simply a question of doing more of something that you knew how to do. We need to do more of something that we actually haven't figured out how to do it yet and that's a big one.

# David Greely (05m 30s):

That is, and that's getting back to your first comment. It's probably one of the things that people really don't understand about what's trying to be attempted. And I'm curious, as you talk with potential investors or people in your life, what do you see as some of the things that people just don't understand about the energy transition that's probably creating some of these opportunities. What are some of the things that, you know, maybe the Wall Street just doesn't get yet?

# John Dowd (05m 54s):

So the, the, the biggest directly feeds into what we're trying to do. I think broadly speaking, everybody is for wind, everybody is for solar, everybody is for batteries and there seems to be a little bit of a misconception of as to where batteries come from and mining has had a very, very difficult history, a very, very challenging history and made a lot of mistakes. That said every battery in the world is made out of something that we mine. I was reading some research from Goldman Sachs and they show that the most over owned group from SG funds is clean energy and one of the most under groups is mining. So that biggest misconception is that we can do this without mining, right. The biggest misconception is that mining is not good for the environment. Now, I'll be the first to admit that the mining industry needs to reinvent itself and reinvent the way they do mining in order to help out the local population in order to help out society in order to help out the environment. That said, it's a necessity to go forward and to invest in ways to reinvent mining in order to progress the clean energy revolution. That's my opinion.

#### David Greely (06m 59s):

Yeah, and I want to come back and talk about that in some detail with you. But when you bring up battery metals, we've talked about this on, on the podcast before and it's certainly in commodities, a time tested investment strategy to, you know, own the bottleneck in the system and when you look at the projected demand for batteries as part of the electrification relative to the supply, it certainly looks like a bottleneck. I'm curious, do you see that as one of the big bottlenecks in the system and there, are there others that you think are equal in scope?

# John Dowd (07m 31s):

That's the biggest we found. The fact that Wall Street has, I think Wall Street has raised over a hundred billion for electric vehicles and batteries, and yet the amount of capital raised for clean mining has been negligible. That's a huge bottleneck, right and this isn't a forecast of demand growth. This is what we're seeing that's solid. That's in stone. What we aren't seeing is a comparable amount of

# SMARTER MARKETS

investment in the mining space to address it. When I look at where the investment is taking place, it's not necessarily in the cleanest jurisdictions. When we were doing due diligence on, on life zone, we timed our first trip to coincide with that of a battery metals purchasing team that was also on the ground visiting the asset in, in Tanzania and what they told us is that they can consume all the nickel they want from Indonesia, but if they do that, they use up their entire CO2 budget per car. And to me that's a profound statement. It means that they need to find cleaner sources of, of mining. It means that they are willing to pay for cleaner sources of mining to me suggests that the product the automobile industry has is no longer a car, but it's a clean, environmentally palatable solution to transportation. And that's, that's new, right. That's a complete transformation.

# David Greely (08m 45s):

And I just wanted to ask you one more question on this because it's not complicated mathematics to see that supply and demand aren't lining up on these things, but the cognitive dissonance of the batteries we need relative to the minerals we are producing to create them, it's still there. And I'm curious, when you talk with the, the people, the car makers, when you talk with the miners, do they see the problem and do they just not know how to address it?

# John Dowd (09m 12s):

I think they're getting there. I don't think they're stating it as a problem. We were at the BMO Metals and Mining Conference this year, and what I heard is that the prior year there was one auto company who showed up, and this year there were 15 auto companies that showed up. It's very interesting to see the auto industry as the client outta metals and mining industry. I expected tons of people from Wall Street and people I knew and they were there, but we were also seeing numerous auto companies show up for the first time when I asked each one of them if they had done a supply and demand balance for clean metals, for clean nickel, and how easy was it going to be to achieve their business model of say, you know, moving to either a 100% or 50% electric by the end of the decade, none of them admitted to actually having done that math.

# John Dowd (10m 00s):

And that's fascinating to me, right, because this is their stated goal. This is their business model and it's very clear the constraint to them achieving their business model is the availability of affordable and environmentally palatable clean metals. So I, look, we are life zone is running a process right now to market their off take. They're having companies reach out to them and ask for details about the metal and ask about how to get access to this metal. So there's definitely interest on the part of the auto industry. You know, one of the things that has given me, I think the courage to, to go forward with this project despite Wall Street's reluctance to invest in the mining industry is, well two things. One is reluctance of Wall Street to invest in the mining, right? That's absolutely a precursor to making a good investment and the second is the fact that the auto industry desperately needs this.

# John Dowd (10m 51s):

And I think the auto industry will be willing to fund projects like this regardless of whether or not Wall Street will, for most of my career I spent on Wall Street, I spent about 14 years at Bernstein. I spent about 14 years at Fidelity and you know, you, you grow up in an industry and you, you start to think that they're always right and they're always six to 12 months ahead of industry. This is a case where I think industry is actually ahead of Wall Street. I think the auto companies have set these goals, they're working to achieve these goals. I don't think we're seeing enough investment from Wall Street to make this doable in a very cost effective fashion. I think we need far more investment by Wall Street.

# David Greely (11m 31s):

And I wanted to dive into how you're getting that investment. How did you go about creating your team and establishing an investment process, maybe just what are the key elements that you wanted in both?

# John Dowd (11m 43s):

So I wanted to put together a team of people with complimentary skill sets and complimentary networks. The goal was to put together a team that has more skills than any single individual. The goal is for one plus one plus one to equal five or seven or eight. I gave a speech to my kids' school about two years ago where I walked them through that. The goal is to put together a team where one plus one plus one equals five and they're all convinced, I don't know how to do math. They tease my son who goes to the school because of that, but at the end of the day, they, the reason teams come together, the reason teams are more efficient than individuals is because they, you know, you add value. So we put together a team of two people with Wall Street experience, two people with clean energy experience, two people with conventional industrial experience, and really that's people with three different languages.

# SMARTER MARKETS

# John Dowd (12m 34s):

So Vikas Anand was CEO of GE's onshore America's wind turbine business that's multi-billion dollar business Dan Folian was CEO of Axiom America, and he has done wind solar battery projects in 48 out of the 50 states. I can't pretend to know what they know, right? So when they speak, I'm constantly surprised. Govind Friedland grew up in the mining industry from, you know, his, his dad is Robert Friedland. Govind went to the Colorado School of Mines and has spent his entire career basically in the mining industry and he knows everybody in the mining industry. I can't predict what he's gonna say, right. The worst thing you want to do is put together a team of people where you can finish all their sentences. If you can do that, it defeats the whole purpose of having a team. So that the goal was to de-risk this process as much as possible by broadening our network and by bringing together people with complimentary skillsets.

# John Dowd (13m 26s):

And then we all nominated our mentors to be on the board. So on the board, Neha Parmar ran Google's energy strategy for a decade. Livia Mahler, CEO of Computational Geosciences, a subsurface imaging company, Greg Hill, COO of Hess, Robert McLeod, former CEO of Frontline Tankers, the biggest tanker company in the world. Nereida Flannery was an early employee at Alibaba and then co-founded an investment bank in China. Adam McGinn is the Former Assistant Secretary of the Navy in Charge of Energy Installations and the Environment and we met with this team every two weeks to give ourselves deadline to get their input on what we're doing and they were fabulous meetings. I mean, these are, these were meetings of 12 people and I felt like it was an honor to be involved with it, right. I was learning so much through the process.

# John Dowd (14m 15s):

We met with 70 different private companies. We signed NDAs with over 30 private companies, and it was extraordinary, right. There are so many really, really bright, talented people out there who have come up with solutions to climate change and are just looking to scale them, access capital, mature them. So it's an incredibly optimistic viewpoint on the world, right. It's very different than what we see in the newspaper and it's colored by thinking a little bit, the newspapers, you know, they don't have the best window into what's going on because you have to sign an NDA to get access to all of this information. By definition, it's, it's confidential and private. These are business models that are trying to progress. That said, there are numerous, very, very attractive companies out there and a lot of very entrepreneurial people all over the world with solutions to climate change.

# David Greely (15m 06s):

That's great to hear and you know, we've been fortunate enough to talk with Robert Friedland a number of times about the critical need for greater investment in the mining industry in order to provide the metals for the energy transition and when you look at these opportunities, these solutions in need of funding, I'd love to talk a bit about the, the specific project you're working on right now for producing nickel sulfide in a cleaner way with a mine that you're working on and I'm curious of all the opportunities out there, what focused you on this investment?

# John Dowd (15m 37s):

Two things. One is when we were going through this process, most of the companies in the clean energy space were missing earnings estimates because of supply chain, because of supply chain challenges and this is the first time in my career that supply chain and inflation have been just joined at the hip. Part of the inflation that we're doing is, I think due to the lack of investment we're seeing in the supply chain for all of these materials and goods and that's something that requires a lot of capital spending to address. So part of it was just an awareness or a rec recognition that the biggest challenges taking place are in the metals, in supply chain space. Part of it was because, right. Like definitely having onboard gave us the ability to due diligence this process and project and go forward. Part of it investment from BHP.

# John Dowd (16m 25s):

So we haven't talked about valuation important in the whole SPAC business is to do a deal that is attractively valued and GoGreen is, is merging with life zone metals at valuation in line with the last private market valuation. The last private market valuation was done by BHP largest publicly traded minor in the world. They invested 90 million into the underlying asset and 10 million into the technology putting a value on this company. They did that when nickel was \$20,000 a ton. Now nickels closer to \$24,000 a ton and we are purchasing at that valuation. So why this deal. The ability to do a deal you know, we are doing a deal that is at last private market valuation that has the endorsement and the participation of one of the largest, most experienced companies in the world. It is, I believe, low on the cost curve.



# **John Dowd** (17m 20s):

It's a company that is over 3% nickel equivalent grade and cause of that grade, it should be one of the lowest cost nickel projects out there. It's nickel sulfide rather than nickel laterite. Nickel sulfides as a rule are better for the environment when processing the nickels. For nickels, they're generally 1% grade nickel. So you have to smelt a 100 tons of ore to get one ton of nickel, nickel sulfides, the first thing you do is grind it up and float it. You get a concentrate that's 20% nickel and therefore you're typically smelting something. You're smelting five tons of nickel concentrate to get one ton of nickel, much better for the environment and this, this company also has a clean processing technology that 1 think offers immense optionality for the future. It's rather than smelting, which is cooking something at 1,200 degrees plus Celsius and burning off everything that's not metal, you are putting this into a pressure oxidation vessel because it's under pressure. You can cook it to 200 degrees and achieve the same result. This is a technology that's been used in the gold processing industry for decades, and life zone is porting it to the nickel industry. So to summarize, it has the valuation of last private valuation. It has a partner in the form of BHP, it has the optionality of the technology and it's fundamentally addressing a part of the supply chain that is seeing structural and investment. So I'm obviously, I'm enthusiastic about this.

# David Greely (18m 44s):

Well would expect you to be and I to ask you about this other piece of it because you know, Robert's also been very clear about his pursuit of the goal of reinventing mining to make it more sustainable and environmentally responsible and you talked about, you know, using a different process and the smelting or relative to smelting and I'm curious, how else are you approaching the need to lower the carbon emissions in the battery metal supply chains?

# John Dowd (19m 09s):

Most of it's the processing, right. Most of it's the processing, the energy is, is going to come from hydroelectric, so that's clean as well. That's what should drive this to be one of the lowest emitting sources of nickel on the planet. That's important in and of itself, right. When you read Tesla's reports, I think 31% of the pollution from making the battery comes from processing of the nickel. So that's fundamentally what we are trying to do is remove that pollution source. That's why the company is called Lifezone, the founder CEO Keith Liddell. His belief is there's one life zone that we live in and we have to take care of it. So this is fundamentally an environmental services company. The ESG credentials don't stop there. The company BHP as well are definitely looking to make this as good a possible a project for the local community as possible.

# John Dowd (20m 01s):

That means maximizing the amount of local labor, it means holding the project to the best international standards. It means partnering with the government rather than the history of the mining industry and, I think it's also hard to overstate how, how significant that is. So the the original contract that the company, well, the contract the company has gives the government of Tanzania a 16% carry in the project. It also gives the country a 6% royalty, and the country has about a 30% tax rate. So in aggregate, once investors have been paid back, their investment, half the cash flow from this project is going to go to the government of Tanzania. So what's that mean. It depends on your nickel price and it depends on whether or not we upsize the project. But this project once up and running could add north of 5% to the government of Tanzania's tax revenues.

# John Dowd (20m 56s):

And that's just huge so when we were, we were invited by the Department of Commerce and by the Biden administration to announce this project at the US Africa Leader Summit in Washington. That's why we announced the project on December 13th. We went there and the, the State Department did their job and they got me seated next to the president of Tanzania. Her one question to us was, how can she help to make this project go faster. So this is a project that is not just about cleaning up the environment, it's also about helping out, it's helping the country of Tanzania develop and grow. It's already one of the fastest growing countries in Africa from a GDP point of view. It already has one of the best credit ratings in Africa. It's a country that is open for business, so it's been a pleasure working with them and meeting with them.

# David Greely (21m 41s):

And I wanted to ask you a little bit more about working with the government in Tanzania because it's so important that as we decarbonize the energy supply chain, we don't do it at the cost of harming the local environment or irresponsible development in countries and what would you recommend to others looking to mine or work in natural resources in places like Tanzania, like what do you find as the key to a good partnership with the government?



# John Dowd (22m 09s):

I mean, I think the key is making it a partnership, right. It's making sure they have an economic interest, a substantial economic interest, making sure there's very, very good communication between the project team and the government, making sure you're all aligned, right. I think it's like any good partnership, it comes down to communication and sharing. So I think this team that is in place running the project where you're combining the entrepreneurs from life zone with the experience team from BHP and the team that's responsible to the local society in the form of the government of Tanzania. I think it's a perfect balance and a perfect mix.

#### David Greely (22m 44s):

That's terrific and I wanted to go back to earlier in the conversation you mentioned, Hal, with the, the ESG ratings, what you'll often see is batteries at the top, mining at the bottom but as you're doing this more sustainable mining, environmentally responsible, partnering with local governments, are you seeing Wall Street recognize those efforts to be more responsible both socially and environmentally?

#### John Dowd (23m 14s):

I think there's a small group of investors who is very aware of the bottlenecks to the energy transition and where they lie, they're looking for a low cost way to play a theme. They're not looking to pay the valuations that some of the publicly traded companies have and they are investing in low cost alternatives in the mining space. I don't think the space is really getting the ESG accolades that it deserves. You know, ESG as an investment style has gone through different permutations. It's been fundamentally challenging because it's subjective while that's one problem. The second problem is that EMS are often anti-correlated. Things that are good for the environment tend to be expensive and therefore bad for the most impoverished rung of society. So fundamentally, that's been one of the big challenges and it's difficult also to see unintended consequences.

# John Dowd (24m 13s):

You know, what are the unintended consequences of stopping drilling in the United States for oil or putting roadblocks to drilling for oil in the United States. The unintended consequences for that are encouraging drilling in Venezuela, Iran, and Russia. Three places where I do not believe they do a better job for the environment when they're drilling for oil. So there are different challenges. ESG as a investment strategy is evolving and maturing and going through growing pains. It's a laudable goal, but it's a challenge. What is nice about this project is that it's an environmental solution that should be cheaper than the alternative because we are processing the ore the concentrate under pressure, we don't need as high a temperature because we, it's not as high a temperature. We could have 70, 80% less energy consumption and that makes it greener. So not every green solution requires a green premium. This is a situation where the E and the S are not anti-correlated, which is nice.

# David Greely (25m 17s):

Sounds like a win. I wanted to ask you maybe with the need to protect business models, this is a bad question, but I was curious what you could tell us about the opportunities and investments you're looking towards next and potentially, you know, what have you learned with your initial investment that you'll carry with you going forward?

# John Dowd (25m 37s):

You know, what I learned from this investment is, you know, it's what I learned from Fidelity, which is fundamentally investing with strong management team is the way to go. You know, I've been working with this management team for about a year now, working on this deal, and I have absolutely the utmost respect for the management team they are tireless, right. They just keep moving forward in spite of market volatility, nickel price, volatility, you know, business is challenging and they find a way to just move forward and move forward and move forward. They have kept their eye on the goal the entire time and have dogmatically pushed it forward and I think that's commendable. In terms of other opportunities, there are lots, right. There are a lot of companies that we met with that we did due diligence on that, you know, maybe they, they weren't quite ready to go public.

# John Dowd (26m 28s):

Maybe they hadn't fully de-risked the technology. Maybe they hadn't achieved the scale of cash flow necessary to move forward. They're out there. There's a fundamental need for more capital to be going into this space. Wall Street hates spending money. Wall Street loves positive free cash flow. That's a challenge, right. It's by definition a challenge. How do you get companies that don't have cash flow funded and yet society needs more money to be invested in moving the supply chain out of China. Society needs more money to be spent cleaning up dirty industries and society needs more money to be spent eradicating bottlenecks to supply chains for clean energy. So we need a lot more money to be spent and the challenge is that Wall Street, you know, wall Street's a little bit more conservative and prefers companies that are already delivering cash flow and, and self-sufficient and self-funding.



# John Dowd (27m 22s):

If that's the constraint, we're going to add a decade or two to the energy transition. And that's fundamentally bad for the environment. So I think it's very important that we as a society figure out how to fund these companies and fund these projects as quickly as possible. Obviously we want them de-risked as much as possible. We need to have teams of people who are capable of doing the due diligence and de-risking the projects, who are putting their own capital behind it, who are moving forward and bringing these companies to Wall Street. So that's basically what we're trying to do.

# David Greely (27m 56s):

Thanks again to John Dowd, CEO of GoGreen Investments. We hope you enjoyed the episode. Join us next week as we conclude our series on the Carbon Frontier with David Antonioli of Verra. We hope you'll join us.

# Announcer (28m 11s):

This episode has been brought to you in part by Base Carbon. The trading of carbon credits can help companies and the world meet ambitious goals for reducing greenhouse gas emissions. But how do we judge the quality of these projects and how can we ensure that our investments are creating real value? At Base Carbon, we are focused on financing and facilitating the transition to NetZero through trusted and transparent partners. It's time to focus on what's important. It's time to get serious on carbon, learn more at basecarbon.com.

That concludes this week's episode of SmarterMarkets by Abaxx. For episode transcripts and additional episode information, including research, editorial and video content, please visit smartermarkets.media. Please help more people discover the podcast by leaving a review on Apple Podcast, Spotify, YouTube, or your favorite podcast platform. SmarterMarkets is presented for informational and entertainment purposes only. The information presented on SmarterMarkets should not be construed as investment advice. Always consult a licensed investment professional before making investment decisions. The views and opinions expressed on SmarterMarkets are those of the participants and do not necessarily reflect those of the show's hosts or producer. SmarterMarkets, its hosts, guests, employees, and producer, Abaxx Technologies, shall not be held liable for losses resulting from investment decisions based on informational viewpoints presented on SmarterMarkets. Thank you for listening and please join us again next week.