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Highlights and Takeaways of 2022 Wall Street Green Summit

Peter Fusaro, Chairman, Global Change Associates

David Greely and Peter Fusaro connect for a special episode of SmarterMarkets highlighting trends and takeaways from the 21st annual Wall Street Green Summit and the role of capital (and carbon) markets in solving climate change.

Peter Fusaro (00s):

Very interested in people that are providing solutions, so we don't have political people at the conference. It's not a governmental conference. This is not a research paper conference. People are always saying, can I send you a research paper, I said, no, this is a practitioner's conference. People providing solutions on our greatest problem, which is climate change.

Announcer (00:21):

Welcome to SmarterMarkets, a free weekly podcast, featuring stories from the entrepreneurs and icons of commodities, capital markets and technology ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together, we explore the questions is capitalism in crisis and will building smarter markets be the antidote

David Greely (59s):

Welcome back to demystifying the carbon markets on SmarterMarkets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Peter Fusaro, Founder of the Wall Street Green Summit, which for 21 years has brought together the leading practitioners and sustainability with the goal of building a more sustainable financial system for responsible investing in the changing role of business. Hello, Peter, welcome back to Smarter Markets. First off, congratulations on holding your 21st Annual Wall Street Green Summit this week. For those in our audience who aren't familiar with the summit, why did you start in, what is your vision for it?

Peter Fusaro (01m 39s):

We started 21 years ago to focus on three things, carbon markets and emissions, renewable energy and energy efficiency and over time it has evolved into a community of 8,000 people who have attended it's. It was always held in New York except the last three have been virtual due to COVID, but the vision very simply is to bring the best practitioners in the world in various markets, not just carbon, not just ESG, but veg tech, climate solutions, energy efficiency, greening the built environment. This year we had ocean investing again, veg tech, the Metaverse, the Green Exchange out of Singapore, Crypto, Blockchain for carbon. So we have a very varied profile. The reason is not one size fits all. Secondly, I'm very interested in people that are providing solutions. So we don't have political people at the conference. This is not a governmental conference. This is not a research paper conference. People are always saying, can I send you a research paper, I said, no, this is a practitioner's conference. People providing solutions on our greatest problem, which is climate change and this is from the vantage point of finance and technology. That's kind of the lens I use.

David Greely (03m 05s):

Yeah, I did have the pleasure of listening to quite a few of the panelists and you have a, a wonderful collection of not only financial market people, investors, but also the real scientists, the engineers, the technologists that are working through some of these new technologies to help all of us reach net zero and this year the agenda focused, you know, on a few key topics ESG investing and reporting, carbon markets and finance, clean energy and greening, the build environment and transportation. Why did you choose those topics to focus on this year?

Peter Fusaro (03m 40s):

About six, seven months ago, I, I said, what's gonna be topical for 2022 and I decided definitely carbon markets and the second thing is ESG. There's a lot of confusion on ESG and it just so happens last week. I should say this week, the SEC came forward with their rule. So the reality is not only is our timing exquisite, because now you have the SEC is going to have mandates for public companies to report on the E of ESG that's environment, their emissions footprint and we attack that from 12 speakers and then the next day we set up deliberately to carbon markets and not just looking at exchanges, which we had several, but also nature based solutions because



there's really a shift in this market. That's only occurred in the last eight, nine months from an oversupplied market to an undersupplied market.

Peter Fusaro (04m 35s):

And I've never seen a commodity market flip that quickly. So for example, nature based solutions have tripled in price in eight months and the reality is there's a lot of carbon developers that are staffing up to provide those solutions. So at our conference, we had South Pole from a number of vantage points. On nature based solutions we had the head of nature based solutions speak and we also had them look at other different credits. So the schema of the event is finance. How do you solve these problems and make money doing the right thing as we say, in New York.

David Greely (05m 11s):

That is very New York. And I would love to you to talk a little bit more about the first part you brought up on the, the more recent SEC rulings because as we've had guests on this demystifying the carbon market series, that's kind of come up over and over this idea that, you know, these net zero commitments, aren't just words. It's not just marketing, but it's gonna be something that companies are held to the way they are held to other types of financial disclosures. So given that it's so fresh and you've just had, you know, great speakers on the topic. I was wondering if you could give us, you know, kind of the viewpoint you take away on these new SEC rules.

Peter Fusaro (05m 52s):

Well, I used to be a policymaker for a regulatory agency in DC, the Department of Energy specifically, so I kind of know the process. What we're going through right now is a notice of proposed rule, making Gary Gensler saying, we are gonna go after disclosure, that's gonna take a process of probably 15, 18 months because you have a notice of proposed rulemaking, public hearings, written comments and this is very contentious, but the end product will be, Gary has the regulatory authority to mandate this. This is gonna impact every major corporation in the United States. It's a very big deal. It's actually seminal because it's now gonna be material on the balance sheet. So about six, seven months ago, I started getting a number of calls on sustainability reporting, sustainability scorecards, sustainability metrics. That's a confusing topic, all of its own because there is no standardization yet in this market, but it's coming.

Peter Fusaro (06m 54s):

So the reality is the US in my opinion, is galvanized now to push faster on ESG reporting, investing carbon footprints and then the next piece of this is going to be offsets because corporations in the United States and around the world are not gonna be able to get to net zero anytime soon. They're gonna have to buy offsets. They've done the low hanging fruit of operational efficiencies. That's an easy thing to do, not a heavy lift and technology cycles are quite long dated, particularly in the energy patch where I've worked for almost 50 years. So it's gonna take time for companies to actually do the energy transition, decarbonize and so they're gonna buy offset. So I see actually the biggest commodity market we've ever seen starting to mature and this is real and material and I have seen this from the vantage point of oil market maturation, natural gas market maturation and electric power market maturation.

Peter Fusaro (07m 59s):

This one's a little different because we have 65 mandated carbon markets in the world and the voluntary market, which right now is quite small. It passed a billion dollars last September, according to ecosystem marketplace, but is sized by most analysts at least to \$95 to a \$100 billion by 2030. So there's a little bit of a carbon go rush going on, which is good. It's not gonna be green washing because you need to buy the superior credits that are validated verified and the reality is all of that is already in place in the ecosystem. So we haven't seen a scaling operation like this anytime soon, furthermore, every single carbon accounting, carbon exchange, carbon platform in the last year has been funded and some have had two rounds of funding. I've never seen anything like that in the venture world.

David Greely (08m 55s):

Absolutely and you referred to the tripling of the price of, you know, carbon, I believe it's in the voluntary carbon markets.

Peter Fusaro (09m 04s):

Yeah. Voluntary markets for nature based solutions.

David Greely (09m 7s):

In your views that largely just driven by the demand and these net zero commitments.



Peter Fusaro (09m 11s):

Definitely. If there wasn't demand we would have very low pricing, which we saw before we had oversupply of credits and frankly we've had bits and starts over the last 20 years. I was a member of the Chicago Climate Exchange. I was on the board of the Carbon Trade Exchange in the UK and Australia and we really never got there and the reason we didn't get there, the United States, the second largest emitter of greenhouse gases after China did not move forward in the Senate with carbon mandates, it didn't happen. So it didn't happen here. In my opinion, ESG reporting is de facto decarbonization. It it's actually gonna happen a different way, but it's gonna have the same kind of impact.

David Greely (09m 56s):

Right and when you look back, you just wrapped up the summit on Thursday. What were some of the other key highlights that came out of the summit for you this week?

Peter Fusaro (10m 07s):

Well, one thing we've, we've been looking at for the last few years and I was very involved early in California with pace financing, property, assess clean energy bonds it really had a lot of trouble getting traction. Now it's very mature, Nuveen bought Greenworks lending. So now it's Nuveen Green Capital. We had Wide Green, another platform for the residential market. What I'm seeing is a tremendous uplift in green bond, securitization, energy efficiency, renewable energy. So we're seeing this actually move faster. 26 states now have pace laws and that's a big deal because homeowners and businesses can start greening their infrastructure, so to speak. So that's one thing that's actually now ready for prime time. Some of these things are long data that took about 15 years. The other thing I'm starting to see a lot of interest in is ocean investing. So a year and a half ago, we had the first ocean fund present today that same speaker came back.

Peter Fusaro (11m 11s):

He's raised over a €100 million. There are now eight funds in ocean investing and what he was very surprised was there's a fund of funds in ocean investing, which is pretty interesting for such an early stage market. That's one thing. The second thing is veg tech yesterday, a veg tech ETF was launched. We looked at saltwater agriculture because you know, most of the land mass, is gonna have a lot of problems feeding 9, 10 billion people by 2050. So I think those were very topical and we also looked at some Blockchain applications specifically with carbon, but we wanted to see and from very different vantage points where crypto was going in the carbon market. So we had a number of exchanges from Brazil, from Singapore, from other places, talk about the Blockchain and that's gonna be very substantive. In fact, for the SEC reporting because once you start looking at the general ledger on the Blockchain, you're gonna have transparency and that is really what we're talking about when this becomes material in the US and I'm seeing a number of advisory staff up on ESG reporting and metrics, score carding, et cetera. Right now it's kind of the Wild West on two market fronts. One is ESG, second is carbon markets, but that's the way markets develop,

David Greely (12m 37s):

Right and for those in our audience who aren't familiar, can you give a couple examples of what ocean investing and veg tech are?

Peter Fusaro (12m 45s):

Sure. Ocean investing is looking at things like mangroves looking at kelp beds. These are gonna be in fact I had a person look at kelp burgers once upon a time. So ocean investing is we have dead zones in the off oceans. People are very aware of plastics in the oceans. They're looking at as a venture side, they're funding at least 20 new companies in the ocean space, ocean tech. This is not renewable energy. This is actually cleaning up the oceans, which need to be remediated. We have tremendous problems, but people don't really understand. We only have two natural carbon sinks in the world. A carbon sink absorbs carbon. One is forestry and the other is oceans. If we didn't have those two entities, the carbon footprint of the globe would be 52 billion metric tons not 38 billion. So it's quite important to start looking at carbon sequestration in oceans as well.

Peter Fusaro (13m 43s):

So that's one area of tremendous growth. The other is veg tech, saltwater agriculture. I mentioned there's gonna be some experimentation in the Caribbean to do some of this in Belize. The reality is we need to start looking at plant based agriculture, much more subsequently than impossible burgers and other ones and the vertical farming is another area, which I think is gonna start getting an uplift. It's lost a lot of money through the different verticals, but I think as climate change becomes real material as, as more stressors on the environment for agriculture, there'll be a lot of interest there. The last thing I wanna mention is hemp. Hemp came up a number of times, hemp actually sequesters carbon 9 to 22 tons, an acre, Texas A&M is doing some research on this right now. There's



actually a hemp exchange in Chicago, which I spoke to a few months ago and hemp can be used for building materials and in the last year on the commodity lumber side, we've seen 500% increase in lumber cost because of all the housing construction going on. So hemp makes a very net zero building material cause it absorbs carbon.

David Greely (15m 02s):

And those are great takeaways. You know, what I'm hearing is the investment dollars are flowing. There's a number of promising nature based solutions coming into their own and that Blockchain looks like it'll have an important role in the record keeping and transparency. That's gonna be so important to keeping these commitments and monitoring them and creating carbon markets. I was curious, you know, in addition to the highlights, were there any surprises for you this week, did you learn something that you didn't know going into the summit?

Peter Fusaro (15m 34s):

Well, not to be too arrogant, but I actually pick speakers and they get homework assignments. So I'm actually not surprised at all. What I try to do is have people share knowledge. It's not very good. If Peter Fusaro is out there saying this as one person, which I did for several decades, actually three decades on climate change, it's much better to have a chorus of 50 speakers, resonating their own opinions and expertise. That's the game here. You have to have the team. As I mentioned, 8,000 people have attended this summit. We'll have another one next year. We may have some mini summits coming up, but the reality is its building community on sustainability and I'll just go back to one analog and I have to tell you this. I was at earth day, 1970 with my solar power. T-Shirt at Carnegie Mellon University. I was also at Woodstock the year before that.

Peter Fusaro (16m 28s):

So it's the children of the baby boomers that embrace sustainability. This is a very big deal. Corporations in the United States continue to purchase renewable energy and there is absolutely no mandate to do that. They are doing that because they cannot attract young employees if they're not lean and green against the world's largest architectural firm had told me several years ago to hire young architects they needed to do green projects. So there's a value here that has shifted and it's resonating in the markets on impact investing in ESG, but it's also behavioral you know, there are still a few climate deniers out there, but the sciences in folks, I have been involved in climate change since March 4th 1990 when I wrote an article on how global warming was, it was called then would impact the oil and gas industry. So I have spent my entire career in the energy patch and we're gonna see the biggest business transformation we've ever seen into energy, clean energy, energy and many manifestation because energy runs civilization, and we're still gonna be using fossil energy.

Peter Fusaro (17m 40s):

This misnomer that we're gonna divest everything. My game is divesting is going away from providing a solution to a problem. I'll you another example, I work with refiners on taking the lead out of gasoline in 1976 and what happened was engineers solve those problems, they took the lead out of gasoline. I took that idea which became called gasoline reformulation to Asia, spoke at every dirty energy conference and ended up changing laws in four countries in Asia. I can now report, there is no lead in gasoline in the world. It's a known carcinogen and so what I'm getting at, if you give a runway for change, the private sector will innovate and get it done.

David Greely (18m 27s):

And you've brought up the word community a couple times so far in our conversation. And I think that's so important, you know, because it's not just about the ESG investing movement, as you said, it's about what the customers want. It's about what the employees want and as you've kind of created this community over the past 20 plus years and going back to the original earth day, how do you keep the community in touch and going and vibrant in between the summits?

Peter Fusaro (18m 56s):

Well, we're gonna try, we just launched some new technology. So on our website, which is thewallstreetgreensummit.com, you can join our community and the idea behind that is for people to reach out to speakers, to share knowledge, to do investment, because the conference is about business development and investment. That's kind of the sub theme. It's always been a lot of business done in the room. Now, when you don't have a room and you have it virtual, it's a little different. So we're trying some new technology out of Israel to actually form more close relationships and my colleague in Tel Aviv told me there was an uptick there, people that put their profiles there and people were asking during the summit for emails, this is we have every LinkedIn profile of every speaker, but we actually think there's a bigger fish to fry of building this sustainable finance community.



David Greely (19m 54s):

That's great and we'll be certain to post that in, in our materials as well, so if people are, if listeners are looking for it we'll have that online for you. I wanted to ask you, you know, you said you picked the topics, you know, maybe about six months ago as anyone planning a conference needs to do. There's a lot that that goes into it, but of course we've had the Russian invasion of Ukraine at the end of February and that's having dramatic effects on the energy markets. I was at the FTE commodities global summit last week and there was a noticeable shift in the conversation towards an emphasis on energy security. What impact have recent events had on people's thinking on sustainable and low carbon energy at the Wall Street Green Summit, do they see it as accelerating the energy transition or perhaps slowing it down?

Peter Fusaro (20m 46s):

It's definitely accelerating, but it already was because the inflection point was reached when you reduce the price of solar by 95% and win by 70%, you're actually moving the market, but what's really occurred here is that energy security is still important. I was very involved in setting up the SPR strategic petroleum reserve. I noticed that President Biden is releasing a million barrels a day. There are 600 million barrels in the reserve. We're not gonna get away from fossil energy. You know, many years ago I worked on the Prius with Toyota, 97, 98. The reality is what does that do, it uses less gasoline and less of environmental impact. So you still got a dichotomy of a world that's dominated by fossil fuels, fossil fuels \$6 trillion business clean energy, maybe \$900 billion business. So it's gonna take time to transition that and security is really gonna be seminal, but we have a geopolitical realignment going on here.

Peter Fusaro (21m 51s):

I'm a political scientist by training and the Russian invasion of Ukraine is seminal. It's the cold war back as a hot war and a democracy versus authoritarianism. So there's actually a line in the sand that's being set up and it's gonna realign energy flow because the reality, the Russians produce a lot of oil and gas, specifically gas to Western Europe. Now, you know, I've worked on LNG projects, with liquefied natural gas projects. You just can't turn the spic it on. These are capital intensive to build gasification and regasification receiving terminals and that takes time. So right now we're in a situation where you've got to look something very long dated. This is not gonna happen tomorrow. So the immediate impact of releasing crude oil, but from the SPR is not going to nullify markets as much as they think the market is set by the, the trading floor so to speak.

Peter Fusaro (22m 53s):

The reality is you've got to refine that oil. So there's also a misnomer. What kind of oil is in the SPR, so because there are different gradations of oil, this, so what I'm getting at is clean energy is here to stay. The transition started, it's accelerating, decarbonization is going a handful of oil and gas companies are embracing what I'll call the new energy industry, which is going to have clean energy as well as electric power. That's gonna be part of the portfolio of oil and gas companies and there will be a divestment from coal. There has been in the United States. We used to burn 55% coal. It's now less than 25%. So point being, it takes time to make any kind of change.

David Greely (23m 46s):

It certainly does and you know, you've witnessed a lot of changes over the past 20 years, you know, the Wall Street Green Summit been there from, you know, the so-called carbon 1.0 days of the 2000s through the lost decade of the 2010s to, you know, where we are with us, say carbon 2.0 today and I would just love to get your perspective on how has the conversation changed over those years?

Peter Fusaro (24m 14s):

Well, I think what's really occurred is that we're seeing unfortunately the impact of climate change. We're seeing it with fires. We're seeing it with water. We're seeing it in agriculture. We're seeing it in ocean currents. We're seeing it in dead zones with the no fish. So reality is it's now real and material and I can actually echo something about two and a half years ago I bumped into the meteorologist for CBS News at climate week. We used to run climate week in New York and he told me Columbia Journalism School was echoing climate change for one week. They had 30 news organizations evolve and I think they were highly successful because now you can't turn off the tube without having something about climate change, but it was really not on the top 5, top 10 list for journalists to cover and I've done a lot of interviews.

Peter Fusaro (25m 12s):

So I think that is the major shift underway. So you got a problem. Now you go to the capital markets for the solution and the solution is not just carbon offsets. It's better technology. It's how we use energy in my opinion more cleanly and environmentally benignly. It's looking at no disruption. This is incremental change for the energy business, the food business and the water business, the three



largest businesses in the world this takes time and there are going to be market failures, but that's part of the game. The better news is, and I'm very involved with the accelerators and incubators as well. There's a lot of great thinking going out, but moving something from the lab bench to commercialization takes time and a lot of capital.

David Greely (25m 59s):

Right and so certainly, as you said, there's been more of an understanding, more of seeing the impacts of climate change, which has certainly changed people's thinking and in terms of those conversations as well, where do you feel like we've made the most progress and what big issues do you think remain unsettled as we look forward?

Peter Fusaro (26m 18s):

Well, hands down we've made the most progress in the energy patch. I mean, making solar affordable for the globe is a pretty great accomplishment. So when solar panels were six bucks a lot, it was very unaffordable. Now it's a commodity market and people in developing countries can leapfrog to better technologies. Wind similarly has come down in price 70% in their better technology, such as induction, wind out of Germany that does not have a gearbox and here in the Northeast, I live in New York, we're now building offshore wind. So we actually are starting to see the fruition of concepts of ideas into tangible impactful results and for investors, they are looking at better opportunities and for what I call NextGen, they want to kick the tires. They want to invest in something that they can see and feel and this area of ESG and impact investing is just getting started. I think this decade is gonna be amazing in terms of the scale scope and solution provision that's coming

David Greely (27m 32s):

And going back how do we avoid being derailed this time, the way things got derailed at the end of the 2000s. Alluded to this a little bit with it being much more driven by corporations now, but you know, how do we not repeat the mistakes of the past?

Peter Fusaro (27m 54s):

That's ancient history. This is very different time when you have 65 mandated carbon markets, that's cap in trade and carbon taxes. When you see corporate buying of offsets, just starting to scale and move, this is the time it moves really and now with the SEC making this real and material on the balance sheet, you basically have alignment of all the factors. This is not a onetime thing before, you know, the Chicago Climate Exchange was voluntary, I was there, Rolls Royce was there, SC Johnson was there, the handful of people that were involved in this. We were kind of pioneers and I've offset my carbon footprint for 40 years, but big deal, but what I'm getting at this time around it's become substantial. The investors are there. There's a little bit of hype, but that's okay when a market gets started and as I said, there'll be some market failures.

Peter Fusaro (28m 53s):

However, this is not what happened before and that was waiting to be blunt for the United States to move on carbon. Now, California did move on carbon with AB 32 and I was involved in the implementation of that law and the EU did move in the EU emissions trading scheme and we saw a few months ago and reached a hundred euro. So what I'm seeing is the price is single is there, the prices are going up. I'm not saying it's only a one way market. There will be traders. There will be hedge funds. There will be volatility. However, it's directionally very different than 10, 15 years ago.

David Greely (29m 31s):

And this is probably an unfair question given you've just wrapped up the summit for this year, but you know, what are you looking forward to talking about at the 22nd summit next, or what do you hope will be on the agenda?

Peter Fusaro (29m 45s):

I know what's gonna be on the agenda. I'm not going away from ESG because there's a lot of confusion in that market and I attacked it from metrics even on crypto and ESG and obviously carbon, these two are thematic. The other are more longer dated climate solutions, carbon tech, climate tech, but realistically I'm not saying it's gonna be the same conference, because what I do every year is I destroy the conference and some of the speakers get angry. I don't re-invite them, but I got rid of 80 plus percent of the speakers. So it's always a new event with new points of view. Otherwise it'd be the same old conference and the other thing we do is we upload all the presentations to our YouTube channel so everybody can see what's going on. So that's another way we're building community. We have a, now about 160 presentations will be up on YouTube for free people. It's called Wall Street, Green Summit. That's it just Google it. So I see these themes being a deeper dive next year, but the same themes.



David Greely (30m 51s):

All right. So just one last question before I let you go. What big issues do you see as remaining unsettled that you know, we all need to get to work on to make these carbon markets more effective?

Peter Fusaro (31m 07s):

Well, the, the easiest thing that hasn't happened at all is standardization. We're not anywhere near that. There's a gigantic task force for the voluntary market with 250 people on. I don't think you can get 250 people to agree about anything so that doesn't really make it interesting to me and I've always said markets like simplicity for replication of trade. You can't have just one off markets. So standardization is one thing. Secondly, there's not gonna be one price for carbon for the whole world. That doesn't make any sense because you have to look at the fuel inputs and what the emissions are. So if you're using natural gas, it's very different than using coal. So the reality is this is just the beginning of platforms. I think we're gonna have to see them stitch together. I'm starting to see like air carbon move into the UAE and Indonesia. These are good things. The more dispersion of platforming, the better it it's the reality is it's not gonna be simple. There's a lot of misinformation about how carbon credits are created and some people don't like carbon credits and the Brits call it dodgy credits, but the reality is this is here to stay and it makes a lot of sense and people are gonna make a lot of money doing it.

David Greely (32m 25s):

Well, we're glad you've been sharing the creative destruction of the Wall Street Green Summit with us for the past 21 years and wish you all the best and thanks again for coming with us today to share the highlights and the takeaways. So thanks again, Peter.

Peter Fusaro (32m 38s):

Thank you. A pleasure being here.

David Greely (32m 41s):

Thanks again to Peter Fusaro, Founder of the Wall Street Green Summit which just completed its 21st annual summit. We hope you enjoyed the episode. Join us next week with our guests, Susannah Pierce, Country Chair Canada and General Manager for Renewables and Energy Solutions at Shell. We'll share her experience turning net zero commitments into plans for making the energy transition a reality.

Announcer (33m 08s):

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