

SM183 | 6.29.2024 The Future of Energy | Episode 5

Joe Raia, Chief Commercial Officer, Abaxx Exchange and Clearinghouse

We continue *The Future of Energy* this week with Joe Raia. Joe is Chief Commercial Officer at Abaxx Exchange and Clearinghouse, which commenced trading in its new physically-deliverable LNG and carbon futures contracts yesterday. SmarterMarkets™ host David Greely sits down with Joe to discuss what it takes to build smarter markets for the future of energy – and where we're going next.

Joe Raia (00s):

We don't try to do things in a vacuum here and just develop products without input from the marketplace. And I think that's a critical part of our success and we will be going forward as we bring these products and relationships to the marketplace.

Announcer (14s):

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 Abaxx Exchange, where trading in centrally cleared, physically deliverable LNG and Carbon Futures contracts is now underway. Ready for Smarter Markets.

David Greely (57s):

Welcome back to the Future of Energy on SmarterMarkets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Joe Raia, Chief Commercial Officer at Abaxx Exchange and Clearinghouse, which commenced trading in its new physically deliverable LNG and Carbon Futures contracts yesterday. We will be discussing what it takes to build smarter markets for the future of energy and where we are going next. Hello Joe, welcome back to SmarterMarkets.

Joe Raia (01m 25s):

Thanks Dave. Good to be back again.

David Greely (01m 28s):

It's good to have you. Yesterday was a very big day for you and all of our colleagues at Abaxx Exchange and Clearing as the first trading began, and its physically deliverable LNG and Carbon Futures contracts. You personally have been working towards this launch for over four years now. How does it feel?

Joe Raia (01m 46s):

It's a great question. I think one that always asks us, okay, you have worked all these years to this, what's the feeling about launching something so important as that we have worked so hard to achieve and it feels great. I think it's just a culmination of all the hard work that our fantastic team has put in across technology and regulations and legal and compliance and trading and it's just amazing how many people really are involved in this effort in any effort like this and we always talk about how few of these entities like ours in the clearing space, risk mitigation space as a clearing house, as a regulated clearing house are out there. It's hard to do. We can certainly attest to that, how hard it is, the cost of it. They need to make sure that everything that we have done brings us to this point and whether it's products or our systems or our partners, we really are very fortunate to have great partners with us across the board, both externally and internally. So yeah, it feels great. We know that our hard work, just from my past experience in launching entities like this and new products, the hard work starts for us now. The good work starts too because we do have something to point to bring customers to that is different than the incumbents that offer products that are not found out in the marketplace today and really will help bring better transparency and risk processes to our customers and ultimately to the marketplace.



David Greely (03m 12s):

And I wanted to ask you about that need you see in some of the things that aren't available in other places because you have worked in the futures and derivatives industry for a long time and I was curious why did you see a need to build a new commodity futures exchange from the ground up?

Joe Raia (03m 27s):

Well, I think as many people that follow us know the work that we started more than five years ago now was focused on the LNG markets. We saw the change, the paradigm change in the structure of that market almost six years ago with the addition of spot market trading in that space. Also, the increase in production from shale gas in the US which dramatically changed the amount of cargoes, the amount of molecules that was being offered onto the marketplace. I think a lot of people know most LNG projects and agreements basically in the past were from Point A to Point B from producer to receiver, whether it was a power plant up in Japan or a manufacturing facilities up in China. Generally when projects were developed, they would basically build a ship around that project and for 20 years transport that gas in LNG form up to the receiver.

Joe Raia (04m 19s):

Those projects generally started to come to an end and you see more firms now engaging in spot market activity as those projects and those term contracts, those 20 year term contracts have generally come to an end and so with that, the market has moved from almost predominantly term structure to we say probably somewhere near 50% of now spot market cargoes that are on the marketplace and that's growing, that's continuing to grow as new production of shale gas comes on the market with that though, is really no underlying futures contract or underlying benchmark that is directly correlated for all those extra cargoes that are on the water place and added to that, we hear from most of our large trading firms, whether they are the big institutional energy companies trading firms, that optimization of their existing portfolio of all whatever remaining term contracts they have is also happening to the point of upwards of 80% if not more of the overall portfolio of a particular firm is now being optimized, meaning they are harboring one location from another.

Joe Raia (05m 21s):

Again, instead of being on that railroad track from the production side to the receiver, they're actually now looking to send the ship maybe from Qatar to Japan and instead of sending the that ship back to Qatar for another cargo, they may bring that to Malaysia or even to potentially to the us. So there is a lot of that optimization going on instead of the railroad track and again, the gap that we saw in the marketplace back then and still it literally existed until yesterday when we launched our LNG futures contract, is the lack of any underlying benchmark contract for pricing, pricing transparency for risk management of those cargoes.

David Greely (05m 56s):

And I want to come back and talk with you about some of the individual markets that you are launching. But first I wanted to ask you because knowing you, I know that you were adamant from day one that Abaxx needed to build its own clearing house.

Joe Raia (06m 01s):

Correct.

David Greely (06m 10s):

And other exchanges haven't ICE launched without its own clearing house back in the day. More recently, FMX futures exchange is planning on launching with interest rate derivatives without its own clearinghouse. So why was Abaxx having its own clearinghouse so important to you?

Joe Raia (06m 26s):

We debated that internally four or five years ago. What was the best, once we decided that of all the feedback we got from the marketplace was that LNG futures were the right way to go and the marketplace needed a futures contracts, not another index. We hear that literally every day now from not only an LNG but other products that we are launching, but the index related products or the non-correlated products that LNG was being priced on was really part of the issue or part of the problem that we were looking to solve and solve for with the LG futures contract, we could have looked at off basically partnering with another clearinghouse to list our products there. But again, the experience you mentioned when ICE launched back in 2002, they were clearing through London Clearinghouse. We launched it literally the same time with Clear Port and we had our own clearinghouse at the NYMEX and that gave us the flexibility to address the issues in the marketplace more quickly, to bring new products to the marketplace more quickly.



Joe Raia (07m 23s):

Whereas I always had to go back to LCH and ask them to list another new product or another new market and it was very cumbersome for them and costly to do that and gave us at the NYMEX the opportunity to continue to roll out products even though we didn't have an electronic trading platform, we had the brokers that were submitting block trades to us, that gave us the ability to expand our breadth of products quite substantially and a lot quicker, which at that point gave us a competitive edge for bringing those new products to the marketplace. And ultimately the success, not only the NYMEX but Clear Port specifically as a new platform for risk mitigation in the marketplace.

David Greely (08m 00s):

You've talked about LNG a couple times now, and I wanted to ask you one more question on it, which was of course, when you joined Abaxx four or five years ago, the focus really was on producing a physically deliverable LNG futures contract. That product slate now is widened out, there's carbon movement into battery metals. But I wanted to ask you, when you first came to Abaxx, what was, what really interested you in building an LNG futures market for physically deliverable cargoes?

Joe Raia (08m 31s):

Yeah, I think it was the people that were here at the time. Dan McElduff and I were partners at the NYMEX when we built Clear Port. He was in the research group. He helped develop a lot of those new products. I knew he understood complexities and difficulties of exchange world and futures world and having to build something or sustain something like that and all the intricacies of it. You know, talking to Dan, I knew there were a long haul to get the exchange and the clearing house built and stood up and launched, but I knew that given his background, my background, I felt that it was going to be a good partnership to bring what we built at the NYMEX over to here and also with Josh, I had met Josh and introduced me to Josh and met Josh probably five years ago. And his vision of not only building something that's relatively similar to what's out there, but also his technology vision I felt was important.

Joe Raia (09:23):

I had seen both from my experiences at both NYMEX and CME and then also moving over to Goldman, those experiences brought me to see both sides of the marketplace from the exchange and clearinghouse side, but also from the largest clearing firm in the commodity clearing world. To see the difficulties and the issues that were out there from things like margin and collateral management, that simple clearing technology that needed to be addressed that hadn't been addressed for a long time. So for me, those two things together, really meeting Josh and meeting Dan and talking about the products and trying to replicate in some way the success that we built at the NYMEX back in the day, which obviously it led to the merger with the CME from the Clear Port platform and the revenue we generated there to see if we can replicate that here.

Joe Raia (10m 07s):

I think looking at the clearinghouse, how we built it, the products that we are looking at, you know, you mentioned not only just LNG but carbon battery metals, other products, precious metals. There is a big opportunity in products that the incumbent exchanges have generally as they brought that into other non-commodity asset classes have generally overlooked and there is great opportunities for us and I think most importantly, those opportunities come from relationships and the relationship built that we've built in the marketplace and others have built over the years brings us these new opportunities. They have come in, I would say from day one and they continue to be brought to us for new product opportunities. And well, I'm sure as we get further down the road this summer into our launch, we'll continue to see new product opportunities be presented to us.

David Greely (10m 53s):

And now that vision with a lot of hard work over four or five years has turned into the reality of an operating exchange in clearing house tradings commenced and soon it will be followed by nickel sulfate and more and I wanted to ask you, Joe, how has your thinking about which products to develop evolved over the past few years and how much is the move to a lower carbon energy system influencing your product pipeline?

Joe Raia (11m 19s):

That's a great question. I think in the back of our minds or in front of our minds, even when we look at new products, we certainly look at a lower carbon energy transition type. In other words used quite loosely in the marketplace as ESG used to be. The energy transition I think has taken over from that. But we do really keep in the back of our minds a lower carbon structure of the products that we look at. We certainly think that LNG and know that LNG is, it is not only an energy transition product, it's an energy solution product and as we were working through the development of those products, the carbon markets were started to develop and we really started to



hear from the marketplace and the traders that carbon was going to be an important part and this is now going back probably, you know, three, three and a half years ago that the voluntary carbon markets were going to be an important part of a growing low carbon solution.

Joe Raia (12m 07s):

Products that we have seen, the big energy companies like the Exons and the Chevrons look at low carbon solution groups within their entities and those are also out there looking for lower carbon solutions for the products that they bring to the marketplace and there is again about a whole host of products in battery metals and sustainable aviation fuels and others that we can look at and even also looking to, I would say offers low carbon solution products to the marketplace that are maybe offset with voluntary carbon market projects that are, you know, monitored and verified. That could be products that we look at in the future. So that's always in the back of our mind. We want to obviously bring products that the marketplace will use that are relevant and also partner as we have with our products now from start to now with the trading community, with the clearing community to figure out what is the best products to bring out there for a better price transparency ultimately, and also better risk management tools.

David Greely (13m 02s):

This podcast series we are focused on the future of energy and as part of your partnerships and product development, you talk with many market participants. So I wanted to get your perspective on how are the market participants that you talk with thinking about the future of energy?

Joe Raia (13m 19s):

It's a good question. They do look at spot market type structure of how what they are looking at. But when we start talking and digging into the firms to the senior leadership of these firms, whether it's in trading firms or clearing firms, they do look at what else is out there to bring to the marketplace. How can they partner with us to utilize our clearinghouse for risk management price transparency for some of these markets that haven't been developed yet, they certainly take time. We think that we have our research and product development group that will be able to bring these products to market relatively quickly, but certainly we need their buy-in. We need pools of liquidity to basically commit to us that they have interest in trading these products. If we do build them and launch them.

David Greely (13m 59s):

Abaxx Exchanging Clearinghouse is arguably the first commodities exchanging clearinghouse focused on physical delivery independently established in over a decade. As you alluded to earlier there are reasons that there aren't many features exchanging clearinghouse in the world. It's hard and I wanted to ask you, looking back over your experience over the past four or five years, what do you think's been critical in getting you to this point?

Joe Raia (14m 25s):

I think that it's a combination of the products, the customers that reach out to their clearing firms to tell them that they want to utilize our products. Clearing firm partners of ours, Donex, KGI and others that will be coming on board that really committed to the chance on us and that's, you know, from my experience in building products and clearing houses and exchanges of my career, the thing that you want to say is relatively commonplace is new products and so, but back in the day when we launched Clear Port, we were focusing mostly on financially settled products, index related products that in natural gas, mostly that were tied to a plats published basis contract. Those are relatively easy to launch, but even with those you had to get clearing firms that would permission their customers to trade those. Not a hard task, but not necessarily back in those days that gas basis contracts were never even traded on any exchange.

Joe Raia (15m 20s):

And so FCMS clear members didn't have any ability to understand, we had to educate them to those products and understand if there was a default, how would they manage the default. What's the margins, what's their risk, allowing their customers to trade those contracts. That's somewhat the easy part when you start looking at a new exchange, again at that level of complexity and difficulty goes up quite a bit. But again, when you add a new clearing house on top of new exchange, on top of new products, you really had an incredible amount of complexity and difficulty, so to speak. A clearing firm needs to look at allowing their customers to trade these products, whether it's LNG or carbon or nickel sulfate, those are brand new. They don't exist in the marketplace pretty much except no carbon. And although our carbon contract is a bit different than what's out there, but when you look at the products, LNG futures physically deliverable, global futures doesn't exist.



Joe Raia (16m 13s):

And those are different risk type structures that have to be looked at from the clearing side and even from the trading side, things are different today than back in 2002, we launched Clear port firms were trading firms, were very eager to find a way to mitigate their risk in the marketplace and moving from a bilateral structure that they had been involved in up to the Enron default in 2001, looking at clear port and ice block and ice clear in oh two as an alternative to their trading and bringing in futures. And so that onboarding or that adoption was relatively quick. Here we have a brand new clearinghouse, a brand new exchange, and bring in new products and so the trading firms and their internal structure now for onboarding is completely different than it was back then and so we have that piece of the equation that also we have to satisfy for as we're now launched and bringing new clients in.

David Greely (17m 05s):

You have mentioned one of the things that's critical are these connections and relationships and establishing these new connections relies on existing relationships and I would say you have more connections and deeper relationships than anyone I have known in commodities and I was curious, just on a personal basis, how have you cultivated and developed those relationships over the years?

Joe Raia (17m 26s):

That's an interesting point, Dave. I know, I think, I always tell my kids never burn a bridge. Relationships are the most valuable and also the people that I've worked with too over the years have had so many people at the NYMEX and the CME and at Goldman I was mentoring during my times there and you know, the relationship part of the business is something that I have always stressed as valuable as anything. You know, it's very easy to lose a relationship, it takes a long time to build it and I think if you are honest, if you are true to your word, if you are really helping, looking to help firms to figure out what's the best thing that, that they can utilize in the markets, ultimately you can't guarantee a follow through from new products but you certainly, and I think in my career, have built all these relationships and have tried always to nurture them and to keep them as valuable as anything that I have.

Joe Raia (18m 13s):

Markets have changed over the years, people come and go and I have been in it a long time. So a lot of the people that I have started working with are certainly not in the business anymore, but it's to be surprised at how many still are and I think that those folks do remember what we built at the NYMEX and back at Goldman and how we, you know, engaged with them to bring better solutions to the marketplace ultimately and I think if you really engage with them and make them part of the conversation, it's really an important parts of the building that relationship you know, we don't try to do things in a vacuum here and just develop products with how input from the marketplace and I think that's a critical part of our success and we'll be going forward as we bring these products and relationships to the marketplace.

David Greely (18m 52s):

There's a lot of Goldman and NYMEX DNA in the Abaxx team a lot of experience people drawn from both companies. Interestingly, I think you may be the one person who has both having worked at both Goldman and NYMEX and so you are the right person to ask. What lessons did you learn from your experience at both that you might want to apply at Abaxx and you know, perhaps what do you want to do differently?

Joe Raia (19m 18s):

You know, my years at the NYMEX were an incredible evolution there. Very quickly. I think somebody used to say there, well evolution takes, you know, hundreds and thousands of years at the NYMEX. We went from a membership organization prior to 2002 to demoralizing private equity investment to going electronic. All of those changes in a very quick timeframe to then going public and to launching other exchanges within the exchange. I think goes back to the relationship question, those are an important part, but it also goes back to the business question now what are you learning and how are you experiencing these changes in the business model and that was a massively huge paradigm shift from the membership model to now a public entity and now merging with, you know, one of the larger exchanges in the marketplace at the CME and how we integrated with them there, which was generally pretty smooth.

Joe Raia (20m 09s):

That was an interesting time. You know, there was a financial crisis in 2007. We went public just before that thankfully and grew the exchange quite significantly after we went electronic and brought new products to the marketplace. Continually, I think as we talked about in the past, that brought almost 2000 products to the marketplace during my time there. The CME back then got what we were doing and understood it, but then the opportunity at Goldman came along and I was looking to bring the relationship part and I think what attracted the Goldman clearing group, Jack McCabe and Mike Dolly, who were the partners that ran the clearing group globally to



what I was doing at the NYMEX and CME was the relationship part of the business. It always goes back to that and they were looking to at Goldman bring some of the bigger players in the energy markets that they didn't have on board with them surprisingly or hardly at all, into their clearing entity.

Joe Raia (20m 57s):

And to bring the systems and technology that we had at Goldman and the balance sheet ultimately to help these firms manage their risk and commodity markets and so going up to Goldman, I think the amount of smart people are there and you were one of them with my relationship experience and the talent that Goldman had from just the brainpower. There was really, I thought, an incredibly fortunate experience for me, especially going over as a managing director, as a lateral hire, which didn't happen. I think as you know, too often that lateral hire MD was for me a really great time in my career and I was able to really help them grow their clearing business, bring in new relationships in some of the biggest trading firms in the world, and look to see as I moved to go to IMAX to look at some of those needs from a clearing perspective in technology and better collateral management that we can then apply here at Abaxx that could help both the Goldman of the world, all the clearing firms, whether they're big or small, but also the customers that they have. So Goldman utilizing my past experience at the Exchange, but that now looking at both of those experiences to bring better solutions to our customers here at Abaxx.

David Greely (22m 03s):

Now I am going to come back to you with the hard question anything you would do differently?

Joe Raia (22m 07s):

I don't think so. Yeah, that's a good question. I have, you know, I even go back to my seagoing career and look at how you manage people back then and people always ask me, how did you end up going from a merchant marine officer to working at Goldman to working at exchanges .There us a lot more connectivity in the DNA side of that than I think people think. But I think ultimately it's all connected and I think you build on your past experiences to just better yourself ultimately, but also better your, the people that you come across as you go through that journey and I don't think I would do anything different. I am so glad I came over here five years ago. The team we have here, again, as I said earlier, is really second to none. It replicates a lot of the things that we did really well at Goldman and you know, I think that a lot of good things are ahead for us and also for the customers that we bring on board with us here. So very excited about that.

David Greely (22m 58s):

Alright, enough about the past. We will move on to the future. Clearly trading has commenced in LNG and carbon on Abaxx Exchange. I wanted to know, based on your experience, you know, how do you see liquidity and volumes developing from here?

Joe Raia (23m 12s):

Yeah, it's, everybody asked that question, is it gonna be Black Friday where they come busting through the doors to buy TVs probably not. I think we probably wouldn't want that just to make sure that, again, systematically we have everything we know is working fine, but we want to make sure that we tested, gone through testing programs here but we know that, and just from my experience, and I think Dan's experience, when you develop new products like this, it does take time to develop liquidity. It takes time for firms that even our first trades, you know, they put the trade on, they wait for it to settle, they wait for the margin to make sure that flows and then the positions show up in their accounts. And so again, there's a lot of things that happen post-trade T or T plus one, that firms are going to wait to make sure that they're okay with the flow of information, them are off to the races.

Joe Raia (24m 00s):

I think that, you know, it will take a bit of time. It's summertime, it's not the busiest time of year. People always ask, when's a good time to launch a new product or a new exchange or a new clearinghouse and I don't think there's always a perfect time. So back in the day when we launched Clear Port Vinnie Viola said, launch it tomorrow until we had, we did that with, you know, a lot of things hanging in the air here. You know, obviously right, the regulatory structure of the marketplace is way different today than it was back in 2002. But you know, we know our systems are sound, we know the customers are onboarding with us. I think that was the nice surprise over, you know, as much as we have been promoting this over five years now, the amount of inbounds from customers to set themselves up with us to trade both electronically and block trades was really has been a, a nice I think a validation of what we've done.



Joe Raia (24m 46s):

The hard work for us, again, as I said earlier, starts now, now we are, we have something that is, that we can point to customers to say, we are live. You can trade. Here is how you access our markets. Versus we're coming in three months or six months or as Dan used to like to say, we're launching, we've been launching in six months for five years. That point has come now and, and we're really happy that we've got to this point. And I think, you know, we'll continue to see interest for new products. You know, at the lithium conference I was at out on the west coast, the inbounds from customers that were there, the very large customers for new products in the marketplace just continues. So they see that the clearinghouse model of this sound, they want to participate in it and they want us to help them build better tools for that.

David Greely (25m 24s):

And I feel like I should be telling you, take some time to relax, take a walk on the beach, play around a golf, but as you said, now's when the hard work starts. So instead I'll ask you what's next as you take this new commodity futures exchanging clearinghouse into the future of energy, what are you focused on?

Joe Raia (25m 41s):

Yeah, I think it's the technology side. There has been a huge gap. There's nothing wrong with the way that market works now. It's very efficient, you know, from a technology trading perspective, but from a collateral management perspective, there have always been, especially during spikes in the marketplace, if you go back a couple of years when we had the Russian invasion of Ukraine, natural gas prices spiked massively in Europe because of the cutoff of natural gas to Ukraine and partially to Europe. That use of collateral and margins on exchange, it needs to be, be a better solution for that. Say that we're working on better solutions in technology with digital identity, with tagging of physical products. There is a lot that the time between we started this and when we launched yesterday has given us the opportunity to focus not only on the exchange and the products, but also on the technology side pretty comfortably that there'll be some good things coming down the road for us on the technology side also.

David Greely (26m 34s):

Thanks Joe.

Joe Raia (26m 36s):

Thanks Dave. Always a pleasure.

David Greely (26m 38s):

Thanks again to Joe Raia, Chief Commercial Officer at Abaxx Exchange and Clearinghouse. We hope you enjoyed the episode. We will be back next week with another episode of the Future of Energy. We hope you will join us.

Announcer (26m 52s):

This episode was brought to you in part by Abaxx Exchange, where trading in centrally cleared, physically deliverable LNG and Carbon Futures contracts is now underway. Ready for Smarter Markets. Contact us at onboarding@abaxx.exchange.

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.