

SM70 | 5.21.2022

Systems at Risk | Episode 2

Bob Anderson, Executive Director, Committee of Chief Risk Officers

Bob Anderson, Executive Director of the Committee of Chief Risk Officers, joins us to share his perspectives on improving risk management for today's energy markets. We'll discuss what's on the CCRO's agenda: from the need for better tools and techniques to value LNG, to managing liquidity pressures from margin calls, to building stronger and more collaborative relationships with FCMs and other members of the market ecosystem.

Bob Anderson (00s):

Going forward with everything happening in Europe and the way that we've got such a big energy transition happening. We're seeing storms like Uri here in Texas that were never seen in history before. It seems like chief risk officers today are really central to the company's strategic thinking because it's all about scenario planning and evaluating the possibilities in the future and less so about the statistics of the past. So I see the CRO role becoming more central for companies that are now moving forward into these new environments.

Announcer (36s):

Welcome to Smarter Markets, 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?

David Greely (01m 01s):

Welcome back to systems at risk on Smarter Markets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Bob Anderson, Executive Director of the Committee of Chief Risk Officers. The CCRO provides an independent forum for members of the energy industry to work together, to develop best practices for all issues related to risk management and is widely recognized in and around the industry as a premier source for independent expert practitioner, knowledge and perspective. Hello, Bob, welcome to Smarter Markets.

Bob Anderson (01m 34s):

Hey David, thanks for having me on the podcast.

David Greely (01m 37s):

Well, I'm really glad to have you here today, in order for you to share your perspective on today's market risk management issues, you have both of course, your own perspective as an experienced risk market practitioner, but also that of the members of the committee of Chief Risk Officers of which are the Executive Director to help us understand that perspective better. I'd like to ask you to start off by sharing with us a little background. What does it mean to be a Chief Risk Officer in the energy industry today? What are the responsibilities in the day to day duties?

Bob Anderson (02m 11s):

Okay. Yeah. Good starter question. You know, the Chief Risk Officer Role in the energy industry really emerged around 2000, 2001. It had been pretty well established in banking, but not in the energy industry and at that time. So what happened was, as we transferred some of the concepts from banking for a Chief Risk Officer and the energy, you find the differences that exist between energy markets and energy companies, operations, you know, versus a bank. So there are some sort of fundamental roles for a Chief Risk Officer in energy that were the original set and then there are some more or less new roles that as the value of a CRO has become more clear that have emerged. So the fundamental ones, for example, would include risk measurement and controls as kind of a basic role. It's the classic topics of credit risk and market risk.

Bob Anderson (03m 09s):

And the management of those, basically the CRO is expected to develop and maintain effective metrics to quantify short and long term risk that the company faces and to create links to appropriate controls on them, you know, controls that support the company's current

operations and growth opportunities and then a second part of the fundamental role would be around risk governance or governance over risk and basically you're having the CRO help ensure that there is governance over the risk in the company and they kind of do that through maintaining documented risk policies and procedures, training programs and so on, basically creating a culture for risk management inside the company and making it clear to outside stakeholders that those that governance exists in the company. So those two areas are really fundamental. There's a third one that's gets very interesting and it would be found in the CRO that has the wider role, a more of a corporate risk officer role.

Bob Anderson (04m 14s):

And that has to do with capital allocation. So here the Risk Officer gets involved for example, in strategic plans or business unit plans and basically helping to communicate to executives and the board, the sources and the magnitude of risks that these plans bring also evaluating alternatives to mitigate those risks in the plan. So it's sort of a next level of strategic planning also on this category of capital allocation would be the transactions specifically. So looking at large structured transactions or portfolio of routine transactions and working closely with the commercial businesses to make sure the company's sort of best financial performance is available when taking risks into account and looking at those transactions. So, you know, the scope it continues to evolve in terms of the scope for the CRO and today, you know, we have new challenges that are really exciting that we discuss at the CCRO and try to tackle ways to advance practices. Some of these challenges, for example, are cyber risks, supply chain risks, the impact from ESG and the performance targets for ESG, you know, the rise that we're seeing now in renewable generation and the emergence of new risky markets like biofuels carbon, LNG, and geez, there's even more. So it's an exciting field it's an expanding field and I'm really glad that you know, that you guys are interested in talking about this aspect of risk management.

David Greely (05m 51s):

Well, absolutely. When you think of, you know, just a few of those risks, you rattled off cyber risk, the energy transition, the demands of ESG investors, the price risk in markets, you know, it's certainly everything that's in the headlines today and when you started off talking about, you know, the CRO role in energy, really kind of developing in 2000, I was just thinking through all of the price moves and markets we've seen since then, you know, oil prices going from \$20 to close to \$150 back down with the, you know, Shell revolution and now, you know, back over a \$100 a barrel again, and I'm curious how much has the, the chief risk officer position really been, you know, kind of centralized to the core of the business as opposed to more at the periphery,

Bob Anderson (06m 41s):

Right, so the, the positioning of a CRO in companies is heavily dependent, obviously on the type of business that companies in and then in the energy industry, right we could be talking about pure market and trading businesses. We could be talking about a utility pipeline, exploration production, you know, there's so many segments in our industry that the CRO role really has to be shaped by what that company is doing. So in the case of regulated utility, you tend to find the CROs, you know, have a very operational role in terms of reporting a lot of them are involved in compliance, but because of the regulatory environment, there are already a lot of limits and constraints around what the company can do when you get into real merchant generation or merchant trading that's when the risks being taken are much more complex and the alternatives or opportunities available for new business are more, you know, complex and larger.

Bob Anderson (07m 45s):

And that's where you see the CRO really become central and a key part of not just the controls, but almost more importantly, a part of decision making in the company and all the things you just mentioned around price movements, changes really highlights the fact that today's CRO, especially with the way it's almost like history's not relevant anymore, because there's going forward with everything happening in Europe and the way that we've got such a big energy transition happening, we're seeing storms like Uri here in Texas, there were never seen in history before. It seems like Chief Risk Officers today are really central to the company's strategic thinking, because it's all about scenario planning and evaluating the possibilities in the future and less, so much about the statistics of the past. So I see the CRO role becoming more central for companies that are now moving forward into these new environments.

David Greely (08m 49s):

Yeah. And recent events, particularly in Europe have certainly pushed risk to the front of the agenda for many companies and I know you recently held your CCRO meetings in Europe with your European membership in London and as I said, it's certainly been an eventful time. So I'm curious, what were the big topics of discussion and concern among your members?

Bob Anderson (09m 12s):

Right, yeah. The European group of CCRO members is growing As those companies are finding that they want to work together on some real deliverables that will things that will help them to advance their own internal practices as well as help to catalyze the emergence of new resources for the industry that are so sorely needed. So we discussed a number of potential current initiatives amongst the group and these included key risk indicators, for example, for trading portfolio risks. So these are metrics that can be monitored internally to act as sort of a leading indicator that maybe something's not working right in the operations of the trading business, very interesting stuff. We're gathering data from members and aggregating them into KRIs that we then published and put up on a web viewer for the members to benchmark themselves against another one was new developments around credit risk management.

Bob Anderson (10m 10s):

As I mentioned, credit risk management kind of an old topic for risk managers and it seems like the science has been pretty well established, but what's happening is there's new emerging mechanisms for managing risk management, things like bonding for example, and some of the old ones have kind of gone away, you know CDSs and things like that. As well, there's new technology now, and we're just about to publish a chapter on credit risk technology it's available today. It wasn't available even just a short time ago. Another topic was the risks that are emerging with carbon reduction driven strategies. This gets real interesting because so many, especially in Europe, you know, they're most vast majority of companies, energy companies are deep into carbon reduction strategies and in some cases they're finding themselves having to transact or at least risk manage some pretty unusual markets like biodiesel and a number of others bring new risks that have to be understood.

Bob Anderson (11m 13s):

But most, most interestingly then the last topic was the one that we decided that we're gonna go forward on with a full blown project is the challenge that these companies are seeing with valuing and hedging LNG portfolios. So in many cases companies have very large transactions that are very long term and these transactions that are being pushed into mark to market treatment for accounting. So when you are moving something big into mark to market its value could swing and cause some earnings variations that are quite large. You add to that, the fact that the markets in LNG are still not mature and don't represent ideal markets for risk management that really makes people worried about the risks that some of these things represent for their company as a whole. So what we decided to do was work now on a framework for managing long term risks. So if you think about it, that's a great way to start because we're talking about all the aspects of methods or practices as well as what's needed things like better indexes and so on, but what is the framework gonna look like for large, you know, companies that are managing large portfolios of LNG trades? It should be a really interesting project. We're all excited to just get started now.

David Greely (12m 40s):

That certainly seems very exciting and I would imagine the CCRO prides is great forum. When you, we talk about a lot of these issues that risk officers, you know, falls under their purview now, and they need to be on top of being able to work with a group of individuals, you know, outside one's own company probably is very helpful in that we'll try to post the, the links when we, we put this episode out to some of your, your most recent papers, turning back to the LNG piece. Like, I'm curious a lot of these, you know, LNG contracts that'll be on people's books, you know, as you said, they're very long term. So how do you even start, you know, with how do you value it, let alone start thinking about how much those the valuations can move. I imagine that's a big part of what the project will be, but like, what's kind of the, the current state of the art that, that people are working from.

Bob Anderson (13m 35s):

Well, yeah, the current state of the art is pretty early in that there's a lot of a lot of proxies that have to be used and, and sort of accommodations for gaps that exist today. We we're hoping we can help close those gaps. But if you think about it, obviously LNG markets exist a lot, lot more robustly than they did just a few years ago and yet at the same time, they have a lot yet to provide for risk managers. But if you look at a 10 year transaction, it's quite a challenge to find a forward curve anywhere that's gonna allow you to market, to market for the full duration. So we tend to use parts and pieces in the, you know, towards the front of the tenure of that transaction. You might be able to find some fairly useful independent forward curves, but as you get towards the back, you lean more and more on modeling.

Bob Anderson (14m 28s):

So these, this, these are exactly the reasons that valuing something like a long term LNG deal as a derivative in mark to market while it is being done. I don't think if we talk to all the different major counterparties in LNG markets today that are doing this, I don't think

we'd find exactly the same approaches to the front of the transaction and the back of the transaction and so this is one of the things that's gonna be interesting to find out in the group is if we can each anonymously share, what are the approaches, what are the accommodations for gaps that we've made in order to get through this on a day to day basis, looking at those practices together, and then agreeing on what are the best approaches is one part of the solution to this project. Then the other part would be looking at the gaps and saying, well, what could happen, what new resources could emerge in LNG to help close those gaps, and what can Chief Risk Officers do to help those changes, those new resources appear. So, you know, you can, you can see the challenges in front of us, but that's about all I could say at this point soon since we're just starting this whole project, that we hope to have a growing list of companies volunteering to participate in it.

David Greely (15m 49s):

And you said coming out of your London meeting that was the top priority of what people wanted to put on the work agenda and what makes it so important for them, why is that the big thing that they want focus on, what are the risks that that's creating for, for these companies?

Bob Anderson (16m 07s):

Yeah, it's, it's, I think if you look at the, the difficulty level of completing the task of marking to market, and then you look at the magnitude of the risk, they're both the largest before these risk officers. So not only is this super difficult and they really need to figure out how to do this, but also the sheer size of these LNG portfolios is just massive. You know, so this isn't thousands of small transactions. This is you know, a reasonably small number of very large transactions. So the materiality and their risk are both super high.

David Greely (16m 42s):

Well, I'm glad you'll be working on it. I wanted to turn to some of the other risks that we're seeing in markets and of course, a lot of it is centered around the events in Europe, both the energy crisis they were experiencing over the winter in the power markets, the gas markets, and then with the Russian invasion of Ukraine and the sanctions on Russia, a lot of high and volatile prices in response to that and there's been a lot of discussion around liquidity pressures on commodity traders as they need to post cash margin for the financial hedges on their physical commodities. A group of commodity traders notably asked the ECB for funding liquidity and were turned down and I was curious how big an issue is this for your members?

Bob Anderson (17m 30s):

Yeah managing the cash swings at a cash flow risk coming from margins on hedges for these transactions is issue. Number one, it's amazing there, you're talking about margin calls that are in the billions and some of these companies have not been performing mark to market transactions. So this is kind of new to them as well. So just the just thinking about the burden of that kind of a cash flow swing, you get a sense for the value that they would need to get out of these transactions, you know, and at the same time, many of these transactions are absolutely must have, right? It's this, you're talking about energy supply that can't be just foregone. So they have to commit to these transactions. So it's a real it is a real challenge when you're faced with those kind of margin calls, those sort of numbers at the same time with no choice, you know, but to deal with it and, and find that cash.

Bob Anderson (18m 35s):

So this is one of the things our members talking about the most is, you know, so these numbers are huge and somehow we're getting through it, but there's got to be a better way and so we'll be talking about other sorts of instruments that we'd like to see in LNG, that we do see in other markets like power and gas there, there's got to be some more ways to smooth the execution of risk management around these physical transactions, so that we don't have these existential threats to companies just coming from margin calls on, on LNG trades. So it, it's gonna be interesting as we evaluate what are those alternative approaches, how can we format some ways to meet those margin calls or other types of transactions that can mitigate some of those margin calls, it's a huge problem though, that really just can't be left as it is. We really need to work to try to help make some new resources appear that will smooth things out of it for this critical industry of LNG.

David Greely (19m 42s):

And it's staggering to think of needing to move, you know, billions, multi billions of dollars back and forth on a daily basis, just to keep a hedge in place on cargos, which, you know, should be a very close hedge, right, but you don't need to, you're not getting the margin on the cargo itself and so I'm curious, I know it's early inning, so this might not be a fair question, but what are some of the ideas that,

you know, are around for how to address this, you mentioned that there might be instruments in other markets that, you know, could be a template for the LNG market.

Bob Anderson (20m 16s):

Yeah. So there's a lot of lot of things there that were on our list of to-dos, but to keep you some examples in terms of what we need from the markets, you know, to manage LNG risks. One thing certainly is, you know, better indexes that create confidence in trading and, you know, what do I mean by better indexes, it would mean indexes that are relevant to the locations where these transactions are happening, you know, where the liquid factions happening and, and vaporization is happening and so you don't have huge location bases to deal with also better indexes would mean you know, indexes that traders and the energy companies can be really confident in they're liquid. They you know, are reporting numbers that are credible to those that participate in them and so we're, we're gonna get around, at the CCRO, we'll be getting around exactly what are those characteristics and documenting what might be done to help indexes appear or the current indexes gain those characteristics.

Bob Anderson (21m 20s):

You know, what can energy companies do to facilitate those positive developments, also consolidation of bilateral trade platforms would help. We need to have a good liquid platform for transacting bilaterally. Currently, there's a number of them. None of them quite reaching established liquidity levels. So perhaps there's some way to find a bilateral transaction site where a lot of trades can be executed and again, companies can be confident in the transactions that are being done on those platforms or on that platform. Another one is liquid exchange, traded transaction opportunities. You know, maybe even an exchange traded opportunity in the US, one in Europe and one in the east. I know Abaxx is certainly working on one in the east, and we're talking about how it would be great to be able to have cleared transactions in LNG, somewhere in the US, you know maybe even us Gulf, but that sort of combination of bilateral trading and exchange trading creates a whole new wealth of opportunities.

Bob Anderson (22m 28s):

Things can start to emerge like derivatives that could provide originators or market makers to offer transaction financial transactions through counterparties to help offset some of the uncertainties in their portfolio, even more standardized terms and conditions and LNG contracts would help for example, around adequate assurance and margining for adequate assurance. You know, they're not all the same in these, in the physical trades, so some of the standardization of terms and condition is something that we plan on working together with days beyond. We have a number of partners in our project who are gonna be great help that I already mentioned, you know, best practices around valuation of these contracts and mark to market world and also, you know, all of these things I think are worth considering together. There's not one that's gonna, you know, be the perfect environment for risk management, but if they can all move forward, then I think it's an exciting time for LNG. It's such a rapidly growing market. If we can just help these things to move forward, as fast as the markets themselves are moving then you know, we can avoid any kind of really large misstep or unwanted consequence along the way. So we're, we're gonna work hard to try to really codify where these gaps are, where the solutions are and what the practices are. It's challenging, but exciting.

Bob Anderson (23m 56s):

Yeah, absolutely, lots of ideas, lots of opportunities to work together as an industry to, to tackle some of these big problems. One last question I had on this was, you know, traditionally banks and bank FCMS would extend credit in various ways to help physical participants, commercial participants maintain these types of hedges. I'm curious, are your members still seeing banks filling that role of extending credit to help meet margin or have they stepped back?

Bob Anderson (24m 30s):

No. I don't think that from what I've talked and heard with some of our members that are most active in these markets is that no, that it just not that they've stepped back and they just seem to step forward yet. The stuff, that kind of market support just hadn't even been invented yet. The problem is as I mentioned, we don't really have credible indexes that companies have a lot of confidence in at least, at least not confidence to the magnitude of the dollars that we're talking about here. You know, the risks associated with these transactions, it's so huge that you really have to have in order for the banks to lay off some of the risks that they don't want to keep, they have to have some place to transact behind them. And there's just no infrastructure for that to happen right now. And so, you know, really from what I'm hearing anyways, there's not that, that rich environment of banks offering derivatives or credit support that you'd see in gas and power. And it's just for all the reasons I mentioned before, you know, that we'll be talking about and working through in the CCRO

David Greely (25m 39s):

That's been pretty shocking. You know, when you look at just recently with all the LNG cargos, going to Europe, in response to Europe, trying to stop using Russian natural gas, you know, you've had so many cargos show up that there have been weeks where there are just, you know, wasn't enough regasification capacity to bring that gas onto the continent and so trading centers like TTF were trading \$9 in BTU or close to \$9 MMBTU below what the price of cargos offshore were trading at and when you think \$9 on like a basis or a hedge, like that's higher than the price of gas in the United States. So these are, as you keep saying, these are big numbers and even being off on your index a little bit has big implications these days.

Bob Anderson (26m 27s):

Oh, absolutely and it's, it's also as fast changing market too. I mean, you throw into the works, the RSG, right. Responsibly source gas, and the nature of the gas that is at least assigned to a cargo of LNG is important. Now, in fact, there's, you know, movements towards one market for RSG or more greenness LNG, as opposed to just regular LNG. So now we get two different prices for LNG, you know, how do we handle that it's not just a, a commodity and a volume. It's also a quality factor now in LNG, that's important to those that are doing these transactions. So that adds yet another dimension, another layer of uncertainty around risk,

David Greely (27m 16s):

A whole another angle. Yeah I'm really glad you were able to come in this week because I thought it was great timing because last week we had Walt Lukken the CEO and President of FIA as our guest And of course the FIA's membership includes FCMS and clearing firms and other market participants and I was curious, you know, how do chief risk officers, how do your members interact with FCMS in that whole exchange clearinghouse ecosystem?

Bob Anderson (27m 47s):

Yeah, it's interesting. In fact, we had seven or eight years ago. We had a summit where we had seven or eight FCMS in the US here, each come and individually explain the strengths of their approach, you know, to being an FCM and the reason we did that really was most CROs do not interact directly with an FCM. It's a part of the mechanism, right? That the company goes through on margins and participation in exchanges, but there's no direct relationship in most cases between a CRO and the FCM. So in this summit, we were able to show Chief Risk Officers at that time that, you know, not all FCMS are necessary, the same, their programs, aren't all the same and in fact, that kind one of the best practices was to have more than one FCM as a trading entity. So there's still a lot more for CROs to learn about FCMS.

Bob Anderson (28m 46s):

And I'm excited to see if our CCRO today can again, bring some FCMS together particularly around this LNG project, right. There's so much demand for liquid markets and FCMS have such a critical role in establishing those liquid markets. I think the shared concerns about risks between the chief risk officer and the energy company and the FCM also obviously very concerned about risk. I think that's shared interest in risk might be, might form the basis for a really interesting meeting or gathering between FCMS and CROs that are involved in LNG markets to try to maybe craft some recommendations for how things can move forward.

David Greely (29m 33s):

It does feel like the timing's really right for that. Where, you know, when I talked with Walt last week, there was a, you know, for me, there's a sense of a lot of the things that risk managers, FCMS, the people that, you know, keep all the pipes of the market infrastructure, keep those all flowing along. A lot of us don't pay attention to them until something goes wrong. So when we start to see, you know, some of the stresses, some of the strains that people who are closer to it have been observing for a while, it can be a good opportunity, as you said, to bring the different market participants together to work forward on solutions that benefit everyone. So I think it's great to hear that the CCCs looking to coordinate more with those FCMS and, you know, if you could pick a couple things that, you know, that type of interaction might really help, you know, having a closer relationship that could help support each other and work together to improve overall risk management in these markets, what might a couple of those areas be? I mean, you mentioned some of the issues in LNG. Are there any others?

Bob Anderson (30m 35s):

Well, just in general, I think it's good for the FCMS to understand what it is that the CROs are struggling with or frustrated with and for the CROs to understand why in some markets, the FCMS just won't move in. I think there's probably some things that could be done by both in order to close some of those gaps and bring things together so that, you know, markets can become more liquid. The FCM costs could come down, margins could be managed better. There, there's just a lot of things to explore some of which I mentioned around

new instruments for managing credit risk and all of these things I think can be rolled into a really fascinating exploration by both groups and hopefully you know, we could, we could give you a detailed list of exactly where we're working, but at this point, all I can tell you is after, after doing this for so long with the CCRO I can tell there's a great environment, a great opportunity here, to bring these two groups together and really make something market changing happen.

David Greely (31m 43s):

Yeah. I think conversations across groups are always so helpful and, you know, it sounds like the CCRO has a lot on its agenda.

Bob Anderson (31m 49s):

Yes, that's true.

David Greely (31m 52s):

We've talked about, talked about FCMS being conversations with those being a very fruitful avenue. If other folks want to help the CCRO or get involved either because they're risk officers or their interested market participants who think that they can, you know, dialogue can be beneficial there as well. How can other people become involved with some of the, the projects you're working on?

Bob Anderson (32m 14s):

Yeah, really all it's a very informal transition or onboarding. All it takes is a call or a email either to you or myself, David it's fine if they want reach to you. But typically, you know, our companies are professional individuals that could be in a large company or a small, I mean, our members range from, you know, Chevron and BP to small retailers. So what it's all about is the shared interest in risk and best practices for risk management. So any of these folks, whether it's a CFO, a Chief Risk Officer, head of creditor or whatever, they're all welcome to get involved and find those initiatives that they can get most out of. So really, it just starts with that reach out and say hey, I'm interested I want to find out more and hopefully they can find your email address somewhere on the actual podcast and I'm happy to put out mine as well.

David Greely (33m 18s):

Yeah and we'll be happy to send out your information in terms of how to contact the CCRO when we put the podcast out, So very happy to, to be helpful with that And you certainly have a, a lot of big things on the plate, a lot of important work that you're doing. I was just curious as we wrap up, what else is the CCRO working on to propose better risk management in these markets and, you know, what's the next three to six months look like for you?

Bob Anderson (33m 45s):

Well, yeah, it looks very busy it's, but they are all interesting, exciting topics and most of them, in fact, never would've thought of five years ago, so that makes it particularly fun. But one is around ESG, you know, a rising topic for companies in the US and one that's been around for a while for Europeans, specifically for us, when we think about where can we have impact certainly the E part around the carbon footprint and strategic plans and set forth to get to net zero in some number of years in the future, these strategies, these plans are pushing companies into areas where risk management may be really difficult and I mentioned earlier biodiesel, you know, carbon, there's a much more involvement with investment in wind and solar and there's a lot of sort of frontier areas where we're getting involved.

Bob Anderson (34m 45s):

So this ESG group is really looking at understanding what would the right ways, what would the right metrics and, and standards be for assessing the carbon footprint of an energy company's portfolio, you know, certainly the rating agencies are doing some of that. Now, some other third parties are, we're gonna look at all the different methodologies they've chosen. In many cases, they're not really designed for an energy company. There may be some recommendations we can make for them to come up with the best, most effective metrics to quantify the difference between a refiner and a, a windmill generator. You know, it's, energy's tricky and that's why the CCRO exists and our role isn't to lobby or anything like that. It's to bring new solutions to bear and to put the spotlight on best practices. So the ESG is one exciting area that we're still early in and, and figuring out what our best path for traction would be.

Bob Anderson (35m 44s):

That's one another very large one is a new credit risk white paper. I mentioned, we have a chapter on technology that's coming out. We have eight more chapters covering, you know, everything from governance over credit and what we're even looking into for oil companies oil and products companies these days. Latin America is creating a new challenge with government owned energy

companies and the challenges they seem to be having around solvency and, how do you assess the credit risk of these transactions with a number of these Latin American countries, so credit risk as well is, is introducing, you know measurement of ESG performance. Now, some companies are integrating that into their assessment of credit risk, best practices around cyber securities another one it's very interesting because while a CIO might implement cyber, you know, software and, and platforms for their company internally, what we're talking about here is cyber for the chief risk officer.

Bob Anderson (36m 45s):

And that gets into sure. You go to have the best practices in place internally, and we should, as risk officers know what those are. But also what about your supply chain, if there are cyber issues for your supply chain, what would that mean for you. We did an interesting scenario recently around what would happen for a generator in the Northeastern US, if a major gas pipeline was taken down by a cyber-attack, how would those local markets for that utility change, what can it do you know, if it suddenly loses its gas supply, what can it do to try to at least maintain minimum operations and so there's a whole interesting initiative around cyber and basically risk resiliency for each types of energy companies. That's those are all very interesting and I mentioned the key risk indicators as well. We're continuing our initiative.

Bob Anderson (37m 41s):

It's an ongoing initiative now with several years of history around latent edited trades and the key risk indicators that we can create from those, so that participating companies can benchmark their own internal results versus our top quartile, for example, and see if they need to improve practices in their trading area in order to reduce any KRIs that they're not performing well on. So, that sort of gives you a few. Obviously we always have new ones coming, but I, I think I like that list because it kind of reflects the diversity of the topics that we're addressing in the CCRM.

David Greely (38m 19s):

Well you're gonna be busy and we're all gonna be better all for the effort. So thank you very much. And thanks for taking the time to come in today.

Bob Anderson (38m 26s):

Absolutely. David and thanks again for the opportunity. I really enjoy it.

David Greely (38m 30s):

Thanks again to Bob Anderson, the Executive Director of the Committee of Chief Risk Officers. We hope you enjoyed the episode. Join us next week when our guests will be Craig Pirrong, Professor of Finance and Energy Markets, Director of the Global energy Management Institute at the Bower College of Business at the University of Houston. We'll discuss the economics finance and risk management of commodity trading firms in today's environment with the streetwise professor.

Announcer (38m 58s):

That concludes this week's episode of Smarter Markets by Abaxx. For episode transcripts and additional episode information, including research editorial and video content, please visit smartermarkets.media. Smarter Markets is 100% listener-driven. So please help more people discover the podcast by leaving a review on Apple Podcast, Spotify, YouTube, or your favorite podcast platform. Smarter Markets is presented for informational and entertainment purposes. Only the information presented on Smarter Markets should not be construed as investment advice. Always consult a licensed investment professional before making investment decisions. The views and opinions expressed on Smarter Markets are those of the participants and do not necessarily reflect those of the show's hosts or producer. Smarter Markets, it's hosts, guests, employees, and Producer Abaxx Technologies shall not be held liable for losses resulting from investment decisions based on informational viewpoints presented on Smarter Markets. Thank you for listening and please join us again next week.