SM221 | 3.15.2025
Carbon Frontiers 2025 | Episode 6

Belinda Ellington, Principal, Ellington Resolution + Senior Advisor, IETA + Former MD, Global Head of Commodities Legal, Citi

We wrap up Carbon Frontiers 2025 this week with Belinda Ellington, Principal at Ellington Resolution, Senior Advisor at IETA, and Former MD, Global Head of Commodities Legal at Citi. David Greely sits down with Belinda to discuss the challenges that banks face in carbon markets and sustainable finance – and why establishing the legal nature of verified carbon credits is a critical step to getting carbon finance flowing.

Belinda Ellington (00s):
So we need to get clarity in the market about what voluntary purchasers can say and do with the credits that they have purchased. We need to get clarity, we need to get transparency on what's happening on the ground, and we need to get clear about the legal title.

Announcer (23s):
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 presented by Base Carbon, sensible carbon investing. For more information, visit basecarbon.com.

David Greely (01m 02s):
Welcome back to Carbon Frontiers 2025 on SmarterMarkets. I am Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Belinda Ellington, Principal at Ellington Resolution, Senior Advisor at IETA and Former Managing Director and Global Head of Commodities Legal at Citi. We will be discussing the challenges that banks face in carbon markets and sustainable finance and why establishing the legal nature of verified carbon credits is a critical step to getting carbon finance flowing. Hello Belinda, welcome to SmarterMarkets.

Belinda Ellington (01m 38s):
Hello there David. Thank you.

David Greely (01m 40s):
Well, thank you for joining us. I have been looking forward to talking with you. You know, I am always interested in the paths and career experiences that bring people into the carbon markets, and you have a particularly interesting one, having been the head of legal teams supporting commodities trading and sustainable finance at Citi and now you're doing important work on the legal foundations for carbon markets at IETA and I am curious what brought you to focus and to work on these issues. How did you begin working in carbon markets and sustainable finance Belinda?

Belinda Ellington (02m 15s):
Thank you. Yes well, you are right. I am a lawyer by trade. I have been a lawyer in the commodities markets for more than 20 years. Most recently at Citi, before that I was at Deutsche Bank and before that I was in the energy and infrastructure department levels. So my entire career has been within the sort of energy and commodities world and financing within that. Now carbon markets are not new. My carbon markets have been around for quite some time. I originally started working when the EU ETS was generated. Now this was a, a result of the Kyoto Protocol, so the first international climate agreement and that's the one that preceded the current agreement of the Paris Agreement. Now the generation of the EU ETS started around about 2005 and I have been in carbon markets for that long. We saw that EU ETS grow and now carbon markets are spreading around the globe.

Belinda Ellington (03m 17s):
There are some 72 different growing markets, many around Asia, south America. We have got the established ones in North America and Europe and also the Middle East. So most recently at Citi, you are right, I was working in commodities financing and also helping give legal support to any kind of environmental products that they had there. So that included the new carbon markets, the markets

which were growing up out of the Paris Agreement, but also other forms of sustainable finance like green bonds, green loans, and other types of sustainable investments. So I would say probably about 18 months ago, I just realized that I had another good 10 professional years inside me and I wanted to give a go at focusing on raising finance towards the goals of the Paris Agreement. And that's really what led me to take the leap into the unknown. Some of the work that I do is through IETA, but I work consistently in trying to alleviate the legal barriers to achievement of the goals of the Paris Agreement and part of that is trying to facilitate the establishment of global carbon markets and leverage global carbon markets for getting financing much needed, financing on the ground and to achieve the climate goals of the Paris Agreement. That's the short recent history

David Greely (04m 59s):
And I would love to dive in with you into some of those legal impediments, legal issues. First I wanted to ask you though, from your work at Citi, could you give us the, a perspective on how banks see their role in financing carbon reduction and removal projects and the broader sustainable finance area?

Belinda Ellington (05m 19s):
Yes, I will start with the end because I think the broader sustainable finance, they are very concerned about, well, most are, some are and some are not, let's just say. But there is the G fans, there's the Global Financial Association for net zero and Citi was part of that and you can have a look to see which banks have joined in and are very committed to trying to facilitate finance on the ground. I think that it's important to note that carbon markets are only one tool in that box. And I mentioned a number of different sustainable financing tools just earlier. So things like green bonds, right? Where investors exactly the same as any other bond with a notes issuance are just with the objective of raising finance towards sustainable goals and just straightforward green lending. Green loans, loans either for, for example, transition away from fossil fuels towards renewables.

Belinda Ellington (06m 21s):
That would be an example or lending with an ancillary objective of a sustainable goal, which might then give the borrower particular benefit. So saw a lot of these kinds of products coming outta Citi and, and I know that other banks are doing the same thing. So there's that side to it. When we have a look at carbon markets, I think it's extremely important to first of all define the different kinds of markets that we have. And I'll try and be do this very briefly, but it's obviously a complicated landscape. One type of carbon market that we have is the type that we have functioning within the EU. This is what we call a compliance market. A compliance market is one where the people participating in that market are there because they have an obligation, they have a compliance obligation, they are required to account for their carbon footprint and then purchase government issued either what we might call a permit to pollute or what we call in the EU an allowance, but it's a government issued document and you account for your carbon footprint, but you must purchase those allowances to offset exactly what your carbon footprint is.

Belinda Ellington (07m 38s):
It's effectively a carbon tax with a market mechanism to price that carbon footprint. So if you can imagine in any market situation, the price of whatever in that market is a function of supply and demand. So the more people within that market emit, the higher the price of the allowances because there are a finite number of them within that market and that encourages people to then readjust, reduce their carbon and if people fall below the target, then the price of those allowances go down by just very normal kind of market-based mechanism. There are a number of compliance markets growing, I mean around the globe with different kinds of mechanisms and different kinds of issuances of government certificates or allowances. Now there is another kind of market or another kind of unit, and I think this is what people mostly think about with growing carbon markets.

Belinda Ellington (08m 38s):
There is another kind of unit, and this is what I call a verified carbon credit. A carbon credit is issued as a result of a project that either removes or reduces carbon from the atmosphere. And as a result of that project and an independent verification of such climate action, a credit is produced. Now those credits have also, the concept of these carbon projects and credits being produced is also not a new thing and has been around for a good 20 years or so, but has been quite niche. People have voluntarily funded some of these projects and the method of kind of proving their funding is to purchase the credit. So it's a little bit like crowd funding a project. You can break up the price of a big project into the particular credit units based on the tonnage of carbon that is either removed or reduced.

Belinda Ellington (09m 39s):
Now within the EU they used to allow certain volumes of verified carbon credits to be used for compliance purposes. They no longer do, but they're constantly under review for that. So there are other compliance markets that also would allow a certain number of

these verified carbon credits to be used for the compliance purposes. An example of that is Singapore. Singapore has a, has a carbon tax rather than a market-based pricing mechanism for carbon, but it allows a certain amount of that tax to be offset simply it's the tax that offset, not the carbon. The tax is offset if you submit verified carbon credits from certain types of projects and methodologies. And this is becoming a growing use of verified carbon credits. Many of the compliance schemes are saying you can use verified carbon credits but only up to a certain amount and of a certain type.

Belinda Ellington (10m 45s):
And frequently these carbon credits are the ones which are being allowed into a compliance system must be from domestic projects. So an example of that would be the new Chinese emissions trading scheme. It's growing. You can imagine that this is has the potential to be a very large carbon market in the future. There are sectors with a compliance obligation and within those sectors they're allowed to submit certain volumes of verified carbon credits but only if they have been produced from domestic projects. And what you create there is a sort of a closed circle, but a market. So finance flows into reduced carbon on the ground, verify carbon credit is produced, that is sold into compliance buyers within the Chinese market. Now you could imagine therefore that the party with the compliance obligation may short circuit that chain of events and actually finance the project themselves.

Belinda Ellington (11m 49s):
And that's the intention. You there have. Just to be clear, you have got allowances which are issued by governments. You could have a tax system on a government, which is which is how you get primary emitters to pay for their carbon footprint. And then you have these credits which are produced from projects which either remove or reduce carbon from the environment. The market for those is totally depends on who is buying and for what purpose. So I gave the example of the Chinese domestic scheme, that's a closed kind of unit closed, closed market. I will give you another kind of so use for these credits. We have a scheme that the airlines must operate in. It's called cor. Now there are certain credits which are eligible for use within the CORSIA scheme and there are some credits which are not eligible for use within the CORSIA scheme but are still being produced.

Belinda Ellington (12m 48s):
So if I am a buyer, I might simply be buying voluntarily and I am buying voluntarily for to meet my own CSR objectives. I might be buying because I have to, right. I have got a compliance obligation under as an airline or under a jurisdictional sector specific. But the market in the credits therefore is determined as all markets are by demand and the price and the type of credit that is under demand is determined by that is raising a price and is being financed is totally determined by demand as all markets are. So just to come back to your original question, which was how are financial institutions getting involved within that market, the carbon market? Well, they have always been involved in compliance markets. If you are a primary emitter, let's just say you are in the EU, you are an energy company, you have to purchase allowances by the end of the year by the deadline and submit them to equalize your carbon footprint. Well that's just an overhead, it's a cost. And like any other cost within a tracing environment, a business environment, you want to mitigate those costs. So banks have always been involved in providing price, hedging and liquidity and forward delivery and that's how they have continued to support their clients in these compliance markets and they will that I suspect that they are looking very carefully at the burgeoning compliance markets and the expanding sectors that are under these compliance obligations and looking to see if they can extend their normal banking support into those new markets.

David Greely (14m 40s):
And I think it's very interesting in that as banks look to extend their normal banking functions to these new markets, I'm curious what impediments they face. What do you see as the biggest obstacles to that?

Belinda Ellington (14m 54s):
Within a compliance market, I think that they will just be mimicking what they do previously for most financial institutions to get involved in any kind of market, you need good liquidity and price transparency and that's where the exchanges come in. Now with the EU ETS by way of example, it's simple. You just have to have a futures contract for an EU ETS eligible deliverable contract. This becomes much more complicated when we are looking at the markets for verified carbon credits which have very small liquidity pools and there are such a broad range of types of methodologies for these projects for use of the credits from these projects that there is, there is very little price transparency and liquidity at the moment. This makes it very difficult for financial institutions to actually enter the market as they would for any other market and trade or buy and sell or provide the normal banking support to players in that market for these verified carbon credit.

Belinda Ellington (16m 06s):
The obstacles that are there, and I will give you an example, right? So a financial institution may want to finance a project in what we would call a prepay financing. So they give the project an amount of money upfront, the project commissions and at some date in the future it will produce carbon credits and the prepay financing says don't give me the money back. I am going to buy in return all of the credits that your project produces, I am going to take in lieu of cash back. Now that seems all well and good, but now I have got a huge risk, I have got project risk. Is it actually going to perform and function and generate the credits that it says it can? I also have no way of tracking the price of those credits. So I have got full market exposure from zero up. I also am not completely certain about what those credits are from a legal perspective.

Belinda Ellington (17m 09s):
So even when they come onto my balance sheet, I am uncertain of how to account for them and how to account for the value of them because we don't have sufficient futures markets to rate that, the price of those credits. So those are normal market functions that don't exist in the market for verified carbon credits. And these are huge obstacles to financial institutions coming in. The net effect is very complicated structured financing. So oddly what we are seeing as I heard the other day is financial institutions instead of purchasing the credits, they're looking at purchasing the project developers and the whole project because then they've got something they can put onto their books, they've got an asset. If the carbon credit itself can't be accounted for as an asset on the balance sheet, then every dollar out the door to try and get that project functioning is zero rated.

Belinda Ellington (18m 07s):
I have got a hundred percent exposure on that money out the door and that makes it very difficult to raise any material financing because as you know with banks, I have to rate that as a hundred percent exposure that affects my risk weighting my capital obligations and it makes the cost of funding extremely expensive. Now there is one area which we are trying to alleviate there, and this is what an example of one of the legal barriers. It's the first step in the stone and that's as first step stepping stone on the path across the barrier. And that is what actually is a verified carbon credit? What is the legal nature of the thing? Is it an asset when I buy it and I book it onto my balance sheet, what in fact is it? And one of the first problems that we have got is this is unclear, the Australians would say that they are clear about it, but in most jurisdictions we're not completely certain.

Belinda Ellington (19m 09s):
I will give you an example. In the UK there are recent digital assets. Bill included expressly verified carbon credits and the bill said that we have got these new types of assets which are coming, we shouldn't turn our back on these. But they don't neatly fit into any of the existing categories of property. However, just because they don't fit into one of the categories, it doesn't mean that they are not property that that's not for the legislative to define. We leave that up to the courts. The net effect of that is we are not really certain what it is. We think it should be a property of some sort, but what that is, we can't be sure. In that context I am working with IETA and I am on a working group with Uniga which is the United Nations legal think tank and we are coming up with a set of principles which should help guide legislation globally to be clear about what the legal nature of a carbon credit is.

Belinda Ellington (20m 13s):
And this will help financial institutions look at that as an asset which they can hold on their balance sheet and it might then fall into common accounting rules. The difficulty at the moment is everybody say, well we know what it is, right? It's an intangible asset, but that's not good enough. If you are the regulatory department in a bank, you can't just say, well we think we know what it is and that's what it should be and therefore that's how we are accounting for it. You have to be sure. And currently there isn't legislation in the US or in the UK or in other common trading hubs which makes this illegal certainty and that is one of the first barriers to financial institutions entering this market and accumulating a portfolio.

David Greely (21m 03s):
And I find this completely fascinating because we are accustomed to kind of seeing maybe the first two big impediments in carbon markets that you talked about that you know you need well-defined source of demand, whether it's a compliance scheme or a net zero commitment from a corporate. You need a benchmark, you need a futures contract that can pool liquidity and provide transparency. But this third one I think is very surprising or will be very surprising to many people to hear that the legal nature of these verified carbon credits, these carbon offsets isn't firmly established. So even putting them on your books if you are a bank is very challenging. I'm interested in what are some of the distinctions of how they may end up being categorized, whether it's property, a commodity, a security, what are the distinctions between those and others that I don't know? Why are those distinctions potentially very important?

Belinda Ellington (22m 08s):
Yes, they're important. I just want to also say that this is not impossible. Some time ago, in my early days as a pre-qualified lawyer, I remember the entering what we call a mooting competition and trying to explain to a very senior judge in the English courts why data on a floppy disc as we used to have it or digital data was actually written. It is data and that it isn't necessarily the code behind it's what comes out the front. The code behind it is just the method of generating the thing that you see on the screen as wildly kind of incomprehensible digital information. Then as you know, a verified carbon credit within the legal world is now how do you classify it? Now there is a common misconception on this one that because the CFTC have come out and said that they consider derivatives of verified carbon credits to fall under their auspices, a verified carbon credit is a commodity.

Belinda Ellington (23m 17s):
That is not the case. The CFTC are concerned with derivatives of any sort because a derivative of any underlier is a financial instrument. It doesn't make the underlier anything at all. It doesn't make the underlier a financial instrument or a commodity or anything. So it cannot be a commodity because a commodity by definition is physical. It's a category of goods, right, goods are also physical. So when we kind of go in and start categorizing things, right, go back to the apples, right? We have got lots of different varieties of apples, but they are all apples in the same way. We start off with the idea of assets or property and then we have real and tangible property and we have intangible property or assets. Now tangible property, one category there is goods and then we have fungible goods which are commoditized properties, tangible goods. And then we have other types of goods which are not commoditized.

Belinda Ellington (24m 22s):
So think you know, a branded coffee as opposed to a commodity of coffee beans, a gold watch as opposed to gold bullion that is traded on the market, right? One is a commoditized good and the other is not. Now verify carbon credits can't fall into that category because you can't pick them up and walk away with them and put them in your pocket, right? They are intangible, but they don't quite fall into the same category as other intangible assets because they are created in a system which is unique. The system of generation means that they don't exist independently anywhere. They exist within a registry and the registry operator has some control and determination still over that credit. Now that's just an example of one of the issues that we have with defining the thing as an asset or as property, but it is absolutely fundamental that we get this correct, right?

Belinda Ellington (25m 20s):
And get and get people to understand that the nature of a credit as being capable of being the subject of proprietary rights and therefore somebody who holds that is the owner of it, is very important to raising finance and to creating a market. Now, I will give you an example, a couple of examples of really why this is important. Now you and I can enter into a contract and I say to you, you pay me a thousand dollars and I will deliver 50 verified carbon credits into your account, right. You give me the money, I transfer the credits deal done, I don't care and you don't care whether actually I have transferred property anything, right? Nobody cares. I have got my money, you have got your credits, and off you go. So on that level, people are going, what does it really matter? Why should we recognize ownership and title?

Belinda Ellington (26m 17s):
And when I say people, I am talking about the registry operators in particular. The registry operators are saying, well, we don't recognize title, that's not our problem, right? But it does matter because it matters. For example, if you have just sold those to me and then you go insolvent, right? Your insolvency practitioner is going to then say, well worthy sold at an undervalued. Was the transfer completed correctly? Whose property is this? Well let's say now it's in my property and I go insolvent. Who does it belong to? Is it really mine? Is this a distribution of an asset disputes over title? Now suddenly complicated disputes, the issue of property then become absolutely fundamental and critical over disputes are security. So how do I use that as an asset for security? Now when we look at the developing United Nations Paris Agreement, carbon mechanism is very much the same.

Belinda Ellington (27m 20s):
It's a whole other generation of verified carbon credits. There will be a market for those as well. They're saying, well why does this matter? Are we really concerned about this becoming an asset? That can be used as collateral? And the answer is absolutely we are. I'll give a couple of examples. Let's say I am a market intermediary, whether I am a financial institution or not, I am funding projects and I now have this asset on my balance sheet, although it's not an asset, I can't account for it because I have got no price transparency, but I have this thing on my balance sheet. In a normal market, I would want to utilize assets on my balance sheet to raise further finance and then potentially add more funding into those carbon projects. You create a circle, you create a liquid market, and money isn't anything. If it's not moving and neither are any assets, they must move, right?

Belinda Ellington (28m 18s):
The movement of an asset is what creates the value in it. If all I can do is keep it in my account, it's not worth anything, I have to be able to move it around. But I can't move it around and use it as security to raise further finance if I don't know what it is and I can't transfer it by way of collateral under standard security agreements. If I can't transfer title and if I can't, if a title is not recognized by the registry, then how can I transfer that by way of security? So although it looks like it's just a very minor issue and you say, well, I can buy and sell these things and it doesn't really matter, it becomes a fundamental obstacle to raising finance at scale. If we don't know what the thing is, and I can't be certain that if I bought something, I've got good title to it because I can't then use it as an asset for other forms of financing. And if that's not happening, I'm not creating liquidity. And if there is no liquidity, then I am not going to encourage exchanges to create futures contracts that give me price transparency and therefore we don't have a market. So you start off, as I say, with the first stepping stone, but that is the stepping stone to generating the market and that's what we are trying to achieve.

David Greely (29m 38s):
And in making that first step, there us always been a lot of interest around how digital tools might help. How do you see the different technologies helping with this establishment of title? You took me back to your student days of data on a floppy disc. It's very similar right now a verified carbon credit exists as data on a ledger probably held electronically somewhere. How does this start to pull together?

Belinda Ellington (30m 08s):
Absolutely. No, it is vital. So I have just pinpointed one of the, the sort of the legal issues, which are one point along the sort of one of the building blocks to creating a market. But to go back to the beginning demand, right? People have to want to buy these credits. You can't just create something, say, okay, now we have solved the problem. It's a, an intangible asset and you've got legal title to it and hope that people buy to make people want to buy. Now, there is extraordinary will, there has been huge will out there from large corporates that do not have a compliance obligation to purchase and I am talking about some of the really major tech organizations, the financial institutions, the people who are not primary emitters. These are what we call the voluntary buyers. And it's what has been termed the voluntary carbon market that has fallen on its knees.

Belinda Ellington (31m 06s):
And one of the reasons it's fallen on its knees is because our reputation, there have been some very high profile bad actors, shall we say, in the market that have done such things as overestimate the volume of credits or actually better to say overestimated the positive environmental benefit of the project, thereby issuing more credits than should have been issued. The net effect of that is if you have bought one of those and this project has come under scrutiny, you then say, oh my god, well I have now bought something that isn't worth anything because the whole point of purchasing in the voluntary market is the reputation. The reputation is the only valuable part of that project. That's what gives the credits its market value. There have been other projects for which very sadly not related to the environmental benefit, but just related to should we say, very poor behavior from people who are working and operating those projects.

Belinda Ellington (32m 16s):
Again, the project's reputation fails, the value of the asset or the credit from that project then goes down and people are frightened of purchasing. They are worried about purchasing because of the integrity of the project on the ground might change after they bought the credit. It may look absolutely perfect when they, they buy it and they are buying it with very good intentions, but then something happens and they are besmirched with the bad behavior on the ground. That's one reason why demand has dried up. People are worried. The other reason is that there is a very unfortunate split in the market as to how you should be using credits that you have purchased voluntarily in respect of your carbon footprint. Now, if you imagine that you have no compliance obligation, so you have in effect know what we call scope one carbon emissions, scope one emissions are those that you generate from burning fossil fuels directly.

Belinda Ellington (33m 22s):
So that would be a power plant or let's say a steel foundry glass manufacturer. So heavy industry scope two are carbon emissions that are produced through purchasing from those primary emitters. So let's just say your electricity that you use to run your business, your factory or a supermarket let's say, but the very large electricity bill, you have got a big scope two footprint, and then your scope three emissions are up and down your value chain. So not directly from, so if you like one step beyond, so what's the carbon footprint of other products that you're using? Let's just say your paper that you are using in your business. So a lot of organizations have voluntarily, so without compliance obligation gone away and looked at their own carbon footprints and accounted for their scope.

One, if they have them two and three carbon and then they've said, we are going to voluntarily go out and finance projects on the ground, get some credits not to offset because you can't actually offset a footprint that has already happened.

Belinda Ellington (34m 34s):
But if you like to compensate for our carbon footprint, and the big hoo-ha that's happening out there at the minute is what claim can you make? In the early days, people would say, well, I have offset my carbon footprint by pine verified carbon credits. And there are a number of parties out there like the VCMI, who are the self-established organization that are give people guidance on what, how to make claims. We are saying you can't use the word offset. Now, to me that's just a semantic problem, but it has frightened people because they are worried about being achieved of green washing. And you've got a slew of litigation out there, mostly in the UK aimed at consumer products that have claimed to be carbon neutral. Apple, for example, recently has come under scrutiny. Many of the like coffee companies, food producers who were saying car manufacturers, those claims are founded on all sorts of different bases.

Belinda Ellington (35m 37s):
One basis is when you start counting the carbon, is it in the entire manufacturing cycle of that watch or that of that car and other people are saying, well, you bought useless credits. You bought credits from a project that has no environmental value. So the best will in the world, people want to finance these projects, but there seems to be a lot of people out there who are acting to try and stop them doing it, which doesn't make any sense to me because the majority of people who are voluntarily purchasing these credits are exactly the people who are also trying to do their best to reduce their own carbon footprint. So that has a really stymied demand. So we need to get clarity in the market about what voluntary purchases can say and do with the credits that they have purchased. We need to get clarity, we need to get a transparency on what's happening on the ground and we need to get clear about the legal title.

Belinda Ellington (36m 46s):
Now we look at the world of technology, so AI, we can call it Blockchain. There are all sorts of different technologies out there which we can leverage to try and increase integrity in the market. So integrity can include in some projects recording the data from which the credits are produced. Can we utilize the technology that we have to give better transparency on what's happening on the ground and give more certainty that the credit you have bought represents a real ton of carbon equivalent reduced or removed. Then people might be concerned about integrity in the market itself, that their credits are being used for, for nefarious purposes, such as money laundering, where you put the transactions, you put the credit itself on a Blockchain and you can see how and where it's moved through, whose hands it's gone. You won't necessarily need or be able to see the price transparency.

Belinda Ellington (37m 49s):
You don't need to, you just need to know that it hasn't gone through, for example, a sanctioned country or a party established in a sanctioned country. So technology Blockchain can help with that. Data can be used to create more transparency on disclosures that a corporate is making in respect of its carbon footprint. And you can tie together the types of credits that they have purchased with the, with the claims that they are making. You can create more transparency across the crediting programs themselves. Aisha was a as along with the Singapore government has produced the CAD trust. The CAD trust is a window into the markets and you can, can see the volumes of credits that have been produced and what kinds of projects this helped market participants see the future volumes that are coming into the market. And this all helps. This is all data which is valuable for market operators, but we have to create the market. First of all, we have got to get the demand going and then this kinds of transparency can really facilitate integrity in those markets and get rid of some of the fears.

David Greely (39m 03s):
One thing I wanted to ask you about is when the carbon markets for all the impediments they have, they are also a natural place for us to experiment and develop and apply the use of these digital tools because the intangible nature, which is problematic, but in terms of it being data and how we work with data and digitize it and use that in transferring title, it's a natural place to start. And at the same time, as you said, you know, carbon markets touch everything. So people are looking at their scope one, scope two scope three emissions. So it's touching their fossil fuel consumption, it's touching their electricity consumption, it's touching how they think about their supply chains. So I guess I wanted to ask you, how do you think about how the work you're doing touches the broader commodity markets, you know, even outside of carbon, how does establishing the legal nature of carbon offsets and the thought process that forces us through and thinking about how to apply new digital tools to that market, how do you think that could affect how we trade and finance other commodities?

Belinda Ellington (40m 15s):
The issue of transparency and integrity is not unique to carbon markets. I mean, my career has been in commodities and sadly the commodities market is susceptible to all sorts of different kinds of fraud, whether that's physical, you know, a real one cargoes of copper suddenly turn out to be actually concrete slabs painted, painted copper fraud in respect of, I mean there was a notorious one, a documentary fraud in in the Chinese ports. Huge, right? Huge documentary fraud relating to base metals across multiple ports. Know cargoes not being quite what they, you thought they were from one end of the one end to the other. Now one of the reasons for this is the commodities world, in particularly the shipping world still relies on, on extremely old system of transfer, of bills of lading. And the digitization of bills of lading into a Blockchain is certainly something which comes up periodically on numerous occasions.

Belinda Ellington (41m 19s):
And this is beyond me, why we have not managed to achieve this digitization of bills of lading because it would give you that kind of transparency into a global market versus is required to make people, you know, more comfortable about what origin source of a commodity through whose hands it has passed before you purchase it. And in the same way that can help improve integrity, I think in all global markets, the carbon credit market no different. It is an odd one, however, because as you say, it is one thing kind of saying, well look, we have got a document that represents a physical underlier. If we are talking about base metals or brilliant for example, and you have got a document, but there is the thing that exists in a warehouse or on a ship somewhere, there is a real physical asset. When we look at carbon credits, the thing only exists in digital form, but it exists inside a registry and the registries do not talk to each other.

Belinda Ellington (42m 23s):
It's like not that they are not interlinked like banks. It's not cashed that can pass from one bank account to another bank account. A carbon credit generated, for example, by one of the carbon independent crediting mechanisms, one of the best known one is Vera cannot be pulled outta Vera and transferred into an account, for example, at the gold standard. Gold standard credits sit in a gold standard registry and Vera credits sit in a Vera registry. This creates also a lack of interoperability and fundability of those credits because you have to have an account in each of those registries if you want to own credits of that type. This is a major operational obstacle. If you tokenize the credits, then you can have an over account, if you like, a token, an account of tokens that represent the underlying credits which are sitting in the registries. And to me, I would look at those registries and I am sure there will be people from a legal perspective who will say it's not the same, but I think about the registries, almost like warehouses. I have got something, it's either in one warehouse or it's in another. It's not in both, but there is a document that represents the thing that can pass around the market and that's what creates a, a kind of physical liquidity or a physical transportability of the asset without having to move from warehouse to another.

Belinda Ellington (44m 00s):
I can buy and sell the commodity through the document. Now the same thing could apply to carbon markets where I could buy and sell the carbon credit regardless of whether it's sitting in a gold standard registry or let's just say even the United Nations Pack and Registry or the Vera Registry. I can buy and sell it through the use of a tokenized digital unit and that can be transferred and some of these exchanges are doing this already, but they tend to be only in the spot market and the reason for that is if once you go into the afford agreement, you then start worrying about whether it's a financial instrument and you need to be licensed and you need a license exchange to do it. So we are back again to the legal nature of the thing. What is it? What is its classification and how do we transfer that around and create liquid market? Personally I think that the tokenization, I think it's good. I don't think it's a difficult step in my perspective. I think we have got bigger things to worry about and that is actually creating the demand rather than how do we operationally create liquidity. I don't think it would take very long at all for people to step into that space once there is a need for such transferability between types of credits from different registries.

David Greely (45m 25s):
I guess that my last question for you is as we look to take that first step to establishing what legally is this thing that you call a verified carbon credit, what are the steps that we need to take and how would we know when we got there? How would we know when we established what it is and will that vary by jurisdiction?

Belinda Ellington (45m 49s):
Yes. Well it would be unfortunate if it does. If it does vary from jurisdiction, what would it look like in the UK well, we need a case going through the Courts now because that's what the legislation says. It says just because it's not doesn't fall neatly into one of these buckets. Doesn't mean it isn't, but we leave that to the Courts. So it would be great if we had a court case in the UK and that was established in other jurisdictions where they have a much more prescriptive, like lesser law or a code like the US it would be wonderful

if they amended the uniform code in the US and simply said, digital assets including verified carbon credits and we consider to be intangible assets full stop. That's actually what it looks like and once you get some of the major jurisdictions doing this, you start to have a trickle effect.

Belinda Ellington (46m 45s):
The UK law is extremely important because it informs an awful lot of other jurisdictions around the globe. We then look at civil law jurisdictions, which are different and this is the problem that we have. Civil law jurisdictions are different from common law jurisdictions. The UK is a common law. One, the US is a codified one, civil law jurisdictions of places like France or Germany. We would need express legislation stating that these are considered to be intangible assets is to me the best interpretation. Now that is very different from the classification of that asset under a regulated regime. So whether it's a financial instrument or not is nothing to do with whether it's an intangible asset, whether something is a financial instrument, is a local jurisdictional issue and actually is designed to regulate the market participants. So by way of example, you probably are very well aware that I can't simply go out into the market and start lending money. We call that loan sharking.

Belinda Ellington (47m 46s):
I cannot lend money because a loan is considered to be a financial instrument and I have to have a license to do that. I have to be licensed by the Financial Regulatory authority of my jurisdiction, which happens to be the FCA and every jurisdiction has its own financial regulatory overseer. What it does is it means that only certain market operators can enter into advice and transactions for those particular types of financial instruments. It doesn't stop me coming round and lending you a tenor if you want, right? It's actually the commercial side of, of the lending. So should these credits, and this is often the question, should they be classified as financial instruments? To me, I don't think so. For a couple of reasons, a financial instrument is a vehicle as an investment vehicle and the purchaser is buying because more frequently like stocks and shares, they are buying as an investment for themselves and they, you know, they are taking a risk.

Belinda Ellington (49m 00s):
It might go up, it might go down, but there it's an investment. People are not buying credits. There may be intermediaries who are rather hoping they will make a market profit on buying the credit, but ultimately the end buyers are not buying them as an investment. The whole point of purchasing is the other direction. The money is supposed to flow down the pipe into the project, not up the pipe to the person that's purchasing it. So I don't see these as investment instruments and therefore they shouldn't necessarily be financial instruments. The other reason not is that we really need a global market for these carbon credits. And if you start regulating, you are going to have different regulations applying from one jurisdiction to the other and you are going to seriously restrict international transactions and by nature, this market has to be global and I will give you an example.

Belinda Ellington (50m 03s):
I may have a project in Indonesia, right on the ground, it's in Indonesia. The registry for the registration of that project might be in Switzerland. The investors are using an American bank as a investment vehicle. They have created, let's say a bond and the proceeds of that bond are being used to finance the project on the ground. The credits are issued into a registry. The credits are then, you know, intentionally and are distributed. They want to be traded across different jurisdictions. It behaves much more like a commodity. It must have an international market and once you start regulating in local jurisdictions, you then start creating pockets of markets instead. So I can't, if I am licensed under the FCA to trade financial instruments, I can't automatically go and do that in the United States. United States, I have to be local registered, there will be restrictions on that and I have to get a local license.

Belinda Ellington (51m 04s):
Sometimes there are passported licenses, but it creates a much more restrictive environment. It doesn't mean there shouldn't be market oversight, but we have to look where that market oversight is required to enable this market. What kind of oversight is needed and again, I would draw an analogy to the commodities markets where in the same way you need a global market. If you think about coffee beans or gold, right? You have got gold mines in all sorts of jurisdictions analogous to the projects on the ground. You then have refiners who are in a different jurisdiction. You could say the refiners of the carbon crediting programs. The product is produced and is pushing a warehouse. The credits are produced and they sit in registries. These are all in local jurisdictions and then the stuff trades and it trades globally and it must trade globally. And that's what we need with the verified carbon credits.

Belinda Ellington (52m 08s):
Now, the way that the commodities markets deal with the market oversight is through industry bodies. The industry wants to have oversight. They want to create what I call a walled garden. The LBMA is an example of that. The London Bull Market Association is a self-regulating industry body. The coffee market does the same. All of these commodities markets have industry bodies that create a safe environment in which to trade and these used to be the physical markets like the corn exchange in London where you had to get in through the door in order to perform your transactions. But once you were in, you kind of had a pretty confident that the other people in there were also good for their word. They were good people because if they didn't perform on their contracts, they got literally thrown out of the exchange or the corn exchange. Now this is the same way that global markets operate for commodities. You create a market without walls where people who are trading within that or under the umbrella of the industry body have got a certain approval or accreditation and you are pretty confident that they are people with integrity and I think that's what we need to help facilitate this market so that people purchasing know that they're buying and selling in a safe walled will garden or safe market from people that are operating with integrity.

David Greely (53m 46s):
Thanks again to Belinda Ellington, Principal at Ellington Resolution, Senior Advisor at IETA, and Former Managing Director, Global Head of Commodities Legal at Citi. We hope you enjoyed the episode. This concludes our series, Carbon Frontiers 2025. We will be back next week with our new podcast series, Gold for the 21st Century. We hope you will join us.

Announcer (54m 12s):
This episode is presented by Base Carbon, a financier of projects involved primarily in the global voluntary carbon markets. Base Carbon endeavors to be the preferred carbon project partner in providing capital and management resources to carbon removal and abatement projects globally and where appropriate will utilize technologies within the evolving environmental industries to enhance efficiencies, commercial credibility, and trading transparency. For more information, visit basecarbon.com. Base Carbon, sensible carbon investing.
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.