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Carbon Frontiers | Episode 5
Peter Zaman, Partner, HFW Singapore

This week on our Carbon Frontiers series, we welcome Peter Zaman back into the SmarterMarkets™ studio. Peter is a Partner at HFW in Singapore and has been practicing law in climate finance and the environmental markets since 2004. One year after Peter took us deep into Article 6, we're circling back to discuss the progress that's been made — and the work that still remains. SmarterMarkets™ host David Greely sits down with Peter to tackle the legislation and mechanisms allowing countries to voluntarily cooperate with each other to achieve emission reduction targets set out in their NDCs.
With over 20 years of experience across UK, EU, and Asia, Peter's rare combination of commodities and climate finance expertise provides a uniquely holistic view of the carbon market ecosystem, crucial to support businesses in their energy transition pathways.

Peter Zaman (00s):
We are trying to allow perfection to be the enemy of the good and I don't think that's a very healthy thing for us to be doing if our genuine purpose is to try and resolve and meet the 1.5 degree target. You know, we can't say we are only gonna support nature-based removals and we are going to ignore carbon capture storage and other tools available to us that are capable of helping us get to the 1.5 degree journey. That's the bit that I really struggle with in Carbon Markets 2.0. There's too much ideological debate and not enough practical considerations of the reality of what 1.5 degrees really means and how we should get there.

Announcer (41s):
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?
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David Greely (01m 20s):
Welcome back to Carbon Frontiers on SmarterMarkets. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Peter Zaman. Peter is a partner at HFW in Singapore and has been practicing law in climate finance in the environmental markets since 2004. Last year he walked us through the intricacies of Article 6 and today he's bringing us up to speed on what's changed, what hasn't, and where we go next. Hello Peter, welcome back to SmarterMarkets.

Peter Zaman (01m 49s):
Thanks Dave. Thanks for having me.

David Greely (01m 50s):
Well, I wanted to have you back because last year you walked us through Article 6 of the Paris Agreement, which governs how countries may meet their climate commitments, their NDC targets through trading in particular through bilateral agreements between countries which are governed by Article 6.2 and a multilateral trading mechanism, which is governed by Article 6.4. Suffice it to say it can be complicated and I recommend our listeners go back and listen to your episode from last year if they want to hear your unique way of making this complicated topic understandable. But before we kick off, I want to say happy birthday as we are recording this on your birthday and it feels like while it's your birthday we're getting the present. So thank you for spending part of your day with us.

Peter Zaman (02m 32s):
Oh thanks. Thanks for the wishes.

David Greely (02m 33s):
Absolutely. Now last time you were here was just after COP 26 in Glasgow in which the rule book for the Paris Agreement was made operational and some of the key issues regarding Article 6 were settled. Now we are well past COP 27. So first question I wanted to ask

you Peter, was if you could take us to where on the frontier we are, what progress has been made on the Article 6 issues since the last time we talked and what remain?

Peter Zaman (02m 59s):
Thanks Dave. Article 6, I guess you have to think about Article 6 and two frontiers. You've got the cooperative approaches under Article 6.2 and you've got the 6.4 mechanism. Now both are Article 6 mechanisms, but the difference as you remember or may remember from our last discussion is that the 6.4 mechanism is the centralized one managed by the un, whereas the 6.2 cooperative approaches is a multilateral or bilateral arrangement between countries. So you've got to think when you talk about the progress between 6.2 and 6.4 slightly differently because the levels of progress are quite different. So to answer your question, let me start with 6.2. I mean actually there's been a fair bit of progress. I would say some countries like Switzerland had a head start and other countries have been fast to catch up. So we actually have 12 finalized cooperative agreements in place and we have 52 memorandum of understanding or similar things that are in development which essentially mean that 6.2 is likely to be able to deliver opportunities and benefits for governments much, much more quickly because essentially it's a G2 G level agreement.

Peter Zaman (04m 08s):
The 6.4 mechanism suffers from all of the problems of a centralized bureaucratic process, right? You've got to make sure you've agreed at who's gonna sit on the board. You've got 190 odd countries trying to agree which one of their representatives gets that honor. You've got to figure all those things out. You've got to work out what methodologies from the CDM you want to amend and bring into the article 6.4 mechanism. You've never really gotten your DNA during from the CDM days removals experience. So you're trying to understand how removal methodologies work. So there's a lot for the 6.4 supervisory board to try and get its head around and that progress has been a bit slower. Then you've got the other issues, the technology infrastructure building, the registries, connecting the registries, all of that sort of stuff. So the short answer is we've made progress, but I don't think we've made necessarily enough progress to give people a proper alternative to the voluntary markets just yet. I think that alternative choice that will be available to them could be available roughly from mid-2024 onwards, but that's a slightly optimistic number on my part. If the methodologies get agreed at COP 28 for the Article 6.4 mechanism, I think you'll see rapid acceleration in terms of people's activity because then they know even if the rules are coming, which type of project activities they should be running to invest in.

David Greely (05m 36s):
Obviously the Paris agreement is an agreement amongst countries, but to make it successful it's gonna need to engage the private sector. As you said the, a lot of the private sectors currently engaged in the voluntary markets as it stands now, which of the article six mechanisms do you believe will engage the private sector? If either

Peter Zaman (05m 56s):
You've given me essentially an opportunity to plug the paper that we wrote most recently, which actually specifically tries to answer that question. I'll confess that I went into the process of writing that paper with a very much of an open mind. I didn't have a preconceived idea that I would land one way or the other. So I decided to give it a bit of an objective rational boundary within which to assess the answer to that question. And actually we framed it as well look at which one of 6.2 and 6.4 is more welcoming to private sector participation. So that was one of the criteria we applied. And on that particular one, the Paris agreement hardwires the idea that even though it's an intergovernmental treaty, private sector participation should apply in the article 6.4 mechanism that's written into the Paris Agreement rule book. It's written into article six itself.

Peter Zaman (06m 48s):
There's no question about whether or not the private sector should participate in Article 6.4. On Article 6.2 however there is no direct reference to private sector participation. So that leaves you with some ambiguity. Now I take the view and I don't know if other lawyers would share the view, but I hope they would that because the Paris Agreement essentially is a bottom up approach that allows countries flexibility to decide how they should deal with their NDCs and therefore how they should engage or not engage the private sector as part of that exercise. I take the view that Article 6.2 silence is intentional on this point because what it says is that I think that's a question for the countries who are going to put together their cooperative approaches and they should decide whether or not they want private sector participation. So in other words, if you want as a country to do a G2G arrangement government to government only, that's perfectly fine.

Peter Zaman (07m 44s):
It just means that you're not leveraging as much as you could or properly the private sector's opportunity to help you scale up the opportunity. If on the other hand you take the view that you want it to be a government to government plus business to business, so G2G plus B2B framework, then cause the 6.2 guidelines are silent on the issue, you'll have to build it in into your cooperative approach framework. And actually if you look at the 12 cooperative approaches that I mentioned that have been finalized, the majority of them do not cater for private sector authorization or participation. And that is a problem because if you want the private sector to engage, the private sector's gonna have its own requirements about certainty of investment that will lead to questions that anybody investing doing their due diligence on. The framework is going to ask, for example, if you authorize my participation, how do I know you won't randomly revoke my authorization 15 minutes after essentially put all my money in?

Peter Zaman (08m 43s):
How do I know that and if the answer is, oh you have to trust me, I'm a sensible government to do these things. Well I'm afraid that isn't gonna cut it. In the world of essentially internal corporate responsible signing off of financial investment frameworks, you know, you've got your due diligence requirements, you've got questions around certainty of return of investment and you can't just leave these things to the whims of essentially one government knowing fully well the next government can come in and change the rules at their will. So you have to build in some kind of protection for the private sector and if you don't do that, you're not really doing a good job in attracting private sector investment or signaling that you want private secondary investment in your cooperative approach framework. So that's one of the tests and the other two tests we applied was the progress made by six two and six four respectively in building out the infrastructure necessary for them to create the framework.

Peter Zaman (09m 35s):
So do you have methodologies in place. Do you have registries in place. Are your registries connected with each other. All of that kind of stuff. And on that one, again, 6.2 might be slightly ahead, but there isn't a lot of point in 6.2 being ahead if there's no private sector role in that place. Whereas therefore the 6.4 mechanism might be a little slower to get going, but when it does your, your private sector role can become much more easily hardwired into it. So there's a greater opportunity to scale your participation in six four through that and last but not least, we tested on the question of environmental integrity and because environmental integrity isn't defined in 6.2 but there is a built-in assurance or minimum built assurance in 6.4 mechanism, we took the view that actually the vagaries or uncertainties of how you ensure environmental integrity in 6.2 really depend on what the parties are negotiating.

Peter Zaman (10m 30s):
Countries agree with each other. So if somebody has a low ambition NDC and therefore can easily generate offsets and the other country says, yeah, I don't care, I'll just take them, then yes, you've got IMOs coming out of it potentially, which are correspondingly adjusted, but the quality of what you're getting is not that good. So there's a challenge there around whether or not your environmental integrity is as good as it should be and therefore if you look at the 6.4 mechanism, that environmental integrity is hardwired by canceling a certain number of carbon credits that are generated to ensure that the impact of the transfer of that 6.4 unit is really genuinely felt by the selling country and therefore the selling country should make sure that that is counting towards making some good productive outcomes for the, for the benefit of that country and therefore for the environment and these differences have led to us sort of landing that I think 6.4 based on how things stand today seem like the better bed.

David Greely (11m 25s):
And it sounds like we're gonna have to get into this notion of corresponding adjustments. I feel it bubbling beneath the surface of your comments there. And I mean clearly with these issues around both of these article six mechanisms still being sorted out. As we said, the private sector is moving ahead with the voluntary carbon markets, but having a set of voluntary commitments alongside a set of national commitments can be problematic from an accounting perspective or at least confusing or at least confusing to me. I want to ask you about two of these problematic areas. The problem of double counting and double claiming as well as the risk you brought of nationalization of carbon reduction in removal projects. That idea that 15 minutes after you get a government promise to make your investment, they could revoke it. But first I want to get into this meteor topic of can you walk us through the problem of double counting verse double claiming and where we are with using corresponding adjustments to solve this problem.

Peter Zaman (12m 25s):
You were not wrong to say it's a complicated issue. Coincidentally, when we were in Tokyo on a work trip recently, somebody walked up to me and says, you know, there's probably about 10 people in the world who understand this issue and I don't think he's necessarily wrong. It may be that it's 20 and not 10, but the point that he's making is really that there are not that many people who've

been able to figure this out. And you know, since the last time we spoke about this in, I think it was just after COP 26 in January, 2021, I've come to the realization that actually there are buying countries and selling countries, both of whom equally struggle with this notion. And I think I understand why the struggle exists and that goes back to the whole point that you know, you are being asked as a country to correspondingly adjust for things that don't fall into your NDC.

Peter Zaman (13m 14s):
And that's the weird part of it because the Paris Agreement Article 6 concept, which says when two countries decide that they want to increase their NDC ambition by doing carbon trading essentially between them, those countries need to ensure that they avoid a double counting. That's all the Article 6 rule book says. It doesn't explain what double counting is, it doesn't define it and it certainly doesn't spell out in Article 6 how you should avoid the double counting. So COP 26 and the Article 6 guidelines resolve the question on how you should deal with the double counting by essentially requiring the host country when they're transferring the credit out from their jurisdiction to put a plus one against this NDC and if you are a buying country and using that credit towards your NDC, then you put a minus one against your NDC. So the idea that you do this minus one and a plus one against your NDC comes purely from a Article 6 bilateral transaction perspective or multilateral transaction perspective.

Peter Zaman (14m 21s):
Now in that group you have a whole raft of potential people signaling in the middle. You could have the credit leave the host country and change hands 15 times before it eventually lands in the hands of the buying country and in the intervening hands of these intermediary countries or people or private sector participants, if they're so allowed, there is no plus minus happening, right. So the plus minus the corresponding adjustment only happens really at the hands of the host country when it's first transferred and at the hands of the buying country, who is the end user using it towards its NDC purpose. So the common sense is that you balance the books ultimately between the people who are creating it and the people who are using it and in between everything else, fine, there's no plus minuses happening, there's no corresponding adjustment needed.

Peter Zaman (15m 09s):
But the idea that a country host country will commit to doing this corresponding adjustment, that concept comes from the Paris Agreement in the Article 6.2 and 6.4 guidelines. So when in the context of a voluntary market transaction, you ask the same question, why are you insisting or asking for a corresponding the adjusted unit. You've got to ask yourself well corresponding adjustment is an Article 6 concept for a purely voluntary transaction. Why am I even talking about it and I think that's kind of the challenge that intuitively or intellectually people are struggling with when the conversation happens in the voluntary space and I can recite the arguments that people make to explain why that is necessary. The only problem is I don't agree with the arguments I don't personally feel that those arguments stand the test of logic, but I think as you remember me complaining back during the sort of COP 26 first conversation, the idea that we should do a corresponding adjustment when the units coming from outside my NDC, but that's what we agreed in the article six framework is itself illogical.

Peter Zaman (16m 17s):
But it's what we've got and what's happened since the last time we talked about this is that the compromise that people reached in order to force through the illogical conclusion that you have to correspondingly adjust even when it's outside your NDC, that compromised deal, which became known as the Japanese solution, essentially allowed host countries through the Article 6.4 mechanisms to say I can create a 6.4 unit and I can have that 6.4 unit treated an issued, but I don't have to do a corresponding adjustment to that and the reason for that really is that it should be a host country's choice as to how that unit is deployed and why is it a host country's choice. Well the real reality is if you require a corresponding adjustment of a host country that is essentially a penalty to the host country, why is it a penalty?

Peter Zaman (17m 10s):
Because if you think about it, if the country has an NDC of a 100 and it has sold 10 credits with a corresponding adjustment, essentially the country now within that NDC period has to generate 110 units to be able to meet its NDC plus it's sold 10, but the 10 that it is now having to generate either have to come from over performance within its NDC sectors or it has to be coming from a sector that's outside its NDC which are typically outside their NDC in the first place because they're expensive. So the cost of abatement or the opportunity cost and the marginal cost of this abatement for a host country gets higher and higher as a country's NDC gets more and more ambitious. So the more we insist on a corresponding adjustment where we don't need one, the more we are saying to the selling country that we are gonna make it more expensive for you to be able to essentially meet your NDC objective.

Peter Zaman (18m 09s):
So the World Bank done a really interesting study and what they did is they, they sort of applied the global change analysis model and you know there are other ways in which you can calculate it, but applying the global change analysis model, they looked at what would be the marginal cost of abatement for a whole raft of countries in the world and interestingly, if you look at some of the countries in in Southeast Asia, the estimated corresponding adjustment cost, which is the marginal abatement cost, is roughly about $25 per ton. That is not counting the cost of the offset itself because the cost of the offset changes depending on what type of offset it is, cook stoves may be more expensive or less expensive than avoided deforestation, just as an example. So whatever that unit price is, if you then add to that this $25, which is the aggregated estimated Southeast Asia cost for a corresponding adjustment, the price of a corresponded adjusted VCU becomes $30 plus dollars a ton, maybe even $40 a ton.

Peter Zaman (19m 13s):
But the corresponding adjustment is something to deal with Article 6 and we are talking about VCU, which is not an Article 6 unit. So why are we applying a corresponding adjustment in a voluntary carbon context and why are we insisting on this corresponding adjustment cost being paid. Now one answer to that is well CORSIA, which is the International Aviation Offsetting Scheme to deal with the ICAO treaty obligations to manage carbon emissions, those ICAO companies, the airlines essentially are going to have to buy offsets from somewhere to be able to meet its CORSIA targets. Now CORSIA's emissions are not Paris Agreement emissions. CORIAS emissions come from the fact that you carve out International Aviation Emissions from the Paris Agreement and you carve out international shipping emissions and you deal with under the IMO agreement. So when we talk about Paris agreement emissions, we are really not counting as part of that NDC requirement.

Peter Zaman (20m 18s):
The countries have to meet the international emissions of their airlines. The domestic emissions of their airlines are called by their NDC, but the international emissions of their airlines are not part of their NDC. So when we talk about a, I'll use a simple example, British Airways as an airline having to source carbon offset to meet its core sea obligations, it has to tap into the supply of emission credits or emission reductions that are available within the host countries because that's your source of supply. So for that source of supply, you're draining carbon offsets that are otherwise capable of you being used within the Paris Agreement and you're taking it and using it in a completely different accounting framework. In this case the ICAO framework for CORSIA purposes. So you are taking it out of the Paris Agreement. Now if you're taking it out of the Paris Agreement and the host countries giving it up and you are insisting that the only way to avoid double counting is by forcing the host country doer to do a corresponding adjustment, you're still forcing the host country to make up for his NDC because he has now chosen to export something that would've been available for him to meet his NDC, but he's now using it in a completely non Paris agreement context.

Peter Zaman (21m 31s):
He's using it in CORSIA and that logic similarly applies to using it in the voluntary markets because the voluntary markets don't require the minus one to be used by the host country at any stage. Similarly with CORSIA, you know, the UK as the parent country for British Airways is not gonna apply a minus one against its NDC when British Airways uses that unit for its CORSIA purposes. So we are penalizing the host country for the supply of carbon offsets to CORSIA just the way we would be penalizing them if they were supplying carbon offsets into the Paris Agreement. But they're completely accounting, different accounting books. So why are we doing a corresponding adjustment. It doesn't make logical sense. Some argue that, well what other ways are there to ensure that we are not double counting and I have some sympathy for that argument because what you're then saying is, okay, the simplest solution for me to make sure there's no double counting, it's to force the country to do a minus one.

Peter Zaman (22m 29s):
But then please do recognize that that minus one that the host country is doing is gonna cost the host country a lot of money. So you are gonna have to pay for it and then my question to you as a buyer of some of a voluntary credit that does not need to be correspondingly adjusted is are you ready to pay that cost if you bought the equivalent corresponding the adjusted credit from the United States. The same World Bank study says that the cost of an American corresponding adjustment, again separating the cost of the actual abatement itself, but the corresponding adjustment cost is about $155 US. So that gives you a little bit of context of the type of price that you are asking yourself to pay by insisting on a corresponding adjustment on a voluntary market product that doesn't need to be correspondingly adjusted.

David Greely (23m 17s):
At the risk of me introducing confusion into your clear exposition, I just wanted to repeat it back a couple things to see if I got them right. First, I think the double counting piece makes sense to people in terms of when it's between countries that are signatories to the Paris Agreement. If one country is going to let another country claim credit for a project and it's within its borders, then that country should have the plus one and the other should have the minus one or vice versa and then when we add everything up, all the plus ones and minus ones cancel out and we kind of know, okay, this were how many aggregate carbon reduction projects done and we get to a number that works counting up on a country basis. Now double claiming seems to be when we go outside that system, so when we start including CORSIA and we start including the voluntary carbon markets, is that right in terms of the, the definition of double claiming versus double counting?

Peter Zaman (24m 15s):
Dave, thank you very much for trying to unpack what I just dumped on you in my previous answer. You're absolutely right. The idea of double claiming comes from the fact that there is no clear definition of double counting. People generally understood what is right and what is not right when it comes to double counting because it's easy to say, well the same carbon emission credit shouldn't be sold twice, double selling the same carbon credit shouldn't be issued twice by two different standards when it's only one ton reduced double issuance, the same carbon credit shouldn't be used twice to meet the same NDC target. These are relatively straightforward scenarios that people can agree on and therefore there is no challenge to say that those are clear examples of double counting. Where people find it harder to agree on is this notion that a country will reduce a ton and therefore it will report that reduction as part of its accounting reporting requirements under the Paris Agreement.

Peter Zaman (25m 20s):
And a voluntary corporate entity outside of that country will make a claim about retiring a ton represented by that same ton that the country is otherwise reporting, so you've got the country saying this mission reduction has happened and therefore I'm reporting it as part of my inventory reporting obligation under the Paris Agreement and that ton of reduction may have come from inside my NDC, it may have come from outside my NDC, it doesn't matter for inventory reporting purposes, I'm gonna report it anyway but then you have the corporate entity saying that I have acquired the right to make a claim that this ton represents one ton reduced and therefore for corporate offsetting claim purposes, I can retire it against my carbon footprint that exists for my scope three emissions and people struggle with the idea that those two things are not double claiming in one purely technical sense, it is true that both people are making a claim, the host country and the corporate, but the claims are being made in the context of two different accounting frameworks and there are two different types of claims.

Peter Zaman (26m 28s):
So actually there isn't a duplication of a claim. There are claims, but it's not the same claim and it's not the same claim being made in the same accounting context. So does that then become double counting. There are some people who say very strongly yes, and there's some people who say no. I originally started out as being one of those people who intuitively felt that it was double counting, but I've now having thought about it for at least three years, come to the clear view that I don't think that double claiming is double counting. But the people who've lost the argument the same way I've gone through a journey and have rationalized it and lost the argument in my own head are now trying to run an argument that says, however you are theoretically disincentivizing the host country from doing what it was supposed to do under its NDC for example.

Peter Zaman (27m 17s):
Anyway, by you paying them to do it. So what you are really doing is you are helping finance their NDC activity, in which case the activity that you're doing really is not additional and therefore if you wanna make it additional, I require that and I insist that the country makes up the fact that this is coming from inside its NDC and they therefore need to make an extra ton and I will therefore insist that they make that extra ton by forcing them to do a corresponding adjustment. In other words, I'm gonna penalize them if you want to make an offsetting claim, otherwise there's no, the offset that you're buying isn't a good offset and I have a real problem with that issue because we've just talked about the idea of corresponding adjustments being there to ensure an avoidance of double counting.

Peter Zaman (28m 03s):
Now the people who are making this argument are saying that I have a concern about additionality and I wanna enforce or improve the additionality situation by forcing you to do a corresponding adjustment. In other words, to make you pay a penalty for it because that way I know that a ton is definitely being achieved reduced elsewhere. So I insist that if you want to make an offsetting claim, you must,

even if it's in a voluntary carbon unit, you must do a corresponding adjustment and I don't get that argument because that's trying to use a double counting tool to justify a weak additionality issue and I have logical problems as well as intellectual problems with saying that I should use a tool for one purpose for a completely another purpose and then make a sweeping statement that says if you don't have a correspondingly adjusted voluntary carbon credit that credit cannot be used for offsetting claim purposes. I just have a real struggle understanding that.

David Greely (28m 56s):
I think I'm gonna keep you on this topic for me to have one more set of questions because I'm finding that you're changing my thinking about this on the fly, so bear with me if you will. So I think one of the really interesting things here is if you start off at the country level as we have and then go to CORSIA, you can make some sense of, okay, well the international air travel wasn't counted under the individual countries. So if we want to get to this kind of scientific concept of what really matters is total cumulative global emissions in terms of temperature rise, we want to be able to at some conceptual level add up the emissions in each country plus the things that are falling through the gaps like international air travel and so at that headline of what are total emissions, it would be country plus international air travel plus maybe international maritime.

David Greely (29m 48s):
And so that idea of double counting starts to make intuitive sense again, I think when I go to the voluntary markets, this notion that you bring up of it's two different accounting systems comes to the foreground because if a corporate is making a claim against its own net zero commitments, that might be something that's happening in a country. It might not be, it might be counted, it might not be, it's just a different accounting system as you said. So the way I'm thinking about it now after listening to you is if a host country has projects, it's not necessarily exporting the claim the way it would under Article 6. If a corporate decides that it wants to buy the credit, instead the corporate and the voluntary carbon markets becomes another mechanism by which the host country can meet its obligations. So we can either get carbon financing from the voluntary markets, it could impose a carbon tax, it could just say you're not allowed to deforest in this area. There's lots of ways it could accomplish that goal in that ambition and the voluntary market just becomes one more way to do it. It's not exporting the credit because they're not in the same accounting system. Is that, am I catching your, your meaning there or does, does that make sense to you or what am I missing?

Peter Zaman (31m 08s):
No, I think you're right. I've made the point I think in many of the papers we've written before that the host country doesn't have to look to Article 6 to raise carbon finance. It could look entirely to the voluntary markets, get the voluntary market to fund its emission abatement opportunity and essentially never have to do a possible adjustment because what they're exporting in those instances, not in and that's perfectly something available to a country. I mean, think of a practical example. If we get to a situation where avoided deforestation, country level programmatic activity isn't accepted for some reason as an Article 6 methodology, let's just take that hypothetical forestry countries will have no choice really, but to go to the voluntary markets if they want to continue to raise financing for protecting forestry. So that's a very good example in my mind of why the voluntary sector may always have a role to play that the Article 6 sector in that example will never be able to fulfill.

Peter Zaman (32m 08s):
You could of course have some countries doing bilateral 6.2 and into that bilateral six two, they recognize avoided deforestation as a relevant mitigation activity. But then that's a smaller bilateral niche arrangement, not necessarily one where the private sector has a role to play. So it goes back to the comment I made earlier about do you want the private sector to have a role to play in these G2G frameworks that you're building? In which case please build in G2G plus B2B. So you're absolutely right, a host country therefore has choices about whether or not it goes down Article 6, whether it goes down Article 6.4, whether or not it goes down voluntary markets. The problem is if we start trying to penalize the country for its choices artificially by insisting on corresponding adjustments when they are no logical reasons for requiring it, then we are really just saying to these host countries that we are trying our best to discourage you from participating in any form of carbon markets.

Peter Zaman (33m 08s):
And we are saying to the buyers, we are really gonna penalize you if you think you're gonna try and offset your way out of your decarbonization objectives and if you think about aviation and marine as two examples of very hard to abate decarbonization sectors, you are saying to them practically, we don't have a scientific alternative for you to decarbonize, but we are gonna penalize you anyway by insisting that any of your voluntary activity must nonetheless be subject to a corresponding adjustment and I'm not sure that that is the right answer when you have no alternative abatement solutions.

David Greely (33m 45s):
I think I'm gonna put the T accounts to the side right now and stop going after the debits and credits. But I do think the takeaway there is by forcing corresponding adjustments to credits that will go into the voluntary markets, you are forcing carbon finance to only be available to the most expensive projects that you know are above the NDC commitment of the country, which makes it very expensive and penalizes the host country and penalizes the corporate with the NetZero commitment that would like to purchase it.

Peter Zaman (34m 17s):
Yeah, I think that's a much better summary than I could have done myself. So well done. Thank you.

David Greely (34m 22s):
All right, I'll give myself a gold star for that one. Now let's go to something equally as important I would think, but hopefully more clear cut and that's the realities of nationalization risk and I'm curious, I think it's pretty straightforward people understand what it means for something to be nationalized, but how is the potential for that affecting the behavior of countries and companies in the voluntary carbon markets right now from your perspective?

Peter Zaman (34m 48s):
It's very clear to me and it always has been clear to me that there are plenty of countries out there and a lot of them are what you would call former non annex one countries under the Kyoto protocol, which is countries who did not have some kind of binding cap and trade obligation or cap under the Kyoto Protocol that in those countries they don't necessarily have legislation dealing with carbon emissions. So if you are Indonesia and you don't have a car manufacturing industry, a domestic car manufacturing industry, are you likely to have laws about whether or not cars produced in your countries must meet a certain minimum emissions standard for car production. Unlikely there may be an international standard that you can look to and you can say I adopt that, but that's an exercise of adopting another country's standard or law and making it a law in your own country.

Peter Zaman (35m 40s):
So for me, nationalization risk is the idea that countries host countries and all of, in fact all NDC Paris Agreement countries who have committed though to their NDC are going to have to start thinking about how they're gonna meet their NDC objectives and depending on the sector they're in or future sectors that they anticipate coming into their NDC, they're gonna need a raft of laws to cater for the ability to manage the cost of a carbon emission because that cost of a carbon emission is now part of essentially that country's NDC commitment. So if you are a country who historically hasn't had laws that regulate and control carbon emissions in your domestic space, you are gonna pass a lot of laws and you're also going to say this cost of abatement that the market is exporting that cost of abatement that the market is exporting has a price on it.

Peter Zaman (36m 34s):
And I wanna make sure that I understand how that price is addressed, managed and organized. So if there are cheaper abatement opportunities that allow me to export more cost effectively, I wanna make sure that I maximize those first. But if I have a voluntary sector entity out there claiming they're already doing it and now people are accusing me of this being double counted, then how do I deal with that. So nationalization risk is really the idea that countries have to get a grip of the laws and regulations in their own countries so that they can achieve their NDC. So activity that in the past that didn't require you in the voluntary sector to engage with host countries, that freedom which existed sort of under the Kyoto protocol is basically no longer I think existing in most NDC countries going forward. Some countries are much ahead of others in passing laws.

Peter Zaman (37m 32s):
We did a paper comparing India, Malaysia and Indonesia quite recently and it was quite clear that Indonesia amongst those three countries is well ahead of the other two. But there every other country's gonna go through this journey of passing their own laws. We hear about Papua Guinea talking about a new article six framework which covers also voluntary market credits. We similarly see something in Ghana and a lot of the multilateral development banks are now funding the processes of these countries developing these authorization frameworks, partially because they need them for article six purposes, but also because they need them to take control of their own domestic emission abatement opportunities anyway. So nationalization risk is really about the coming into force of those laws progressively and how they impact hither two unregulated activity like the voluntary market activity.

David Greely (38m 24s):
Yeah, and while we're on the topic of some of the risks to those in the voluntary carbon markets, I wanna ask you about another risk that's not specific to Article 6, but it's this idea in Elli who was on last week from base carbon brought up the changing perceptions of quality when it comes to looking at reductions versus removals among corporates with net zero commitments. And I was curious if this is a topic of conversation among your clients and how do you advise them to think about reductions versus removals and the relative risks of the two?

Peter Zaman (38m 59s):
I'm very much looking forward to hearing her views on this because you're right, it's a topic we get to talk to our clients about all the time and it's because our clients want to know what to invest in. That's the reality. If you take the view that there are some categories of carbon mitigation actions such as avoided deforestation which fall into the reductions camp that are not necessarily kosher for the purposes of certain corporate claims, then you've got a real problem as to why you should invest in them today. But then ask yourself this other question, why would I not invest in them and if the answer is I'm not investing in them because somebody has told me I shouldn't invest in them, then you've go to ask yourself, did I really understand that before I signed up to it and agreed to that because let's, let's ask ourselves, what is the role of removals and how is that distinct from reductions?

Peter Zaman (39m 52s):
So removals are conceptually where you've already got a ton in the atmosphere and you've come up with some form of technology-based or nature-based solution to remove that ton from the atmosphere. Now that's good. The problem is that removal technology like that is much more expensive than reduction technology and we have a much shorter track record of dealing with them. So when it comes to the investability of these things, we have less experience. Put it simply. Carbon reductions on the other hand are something we have been working on since the beginning of the Kyoto Protocol. So we have 15 plus years of experience of dealing with them and in those 15 years we have learned a lot, we've learned some good things, we've learned some bad things. But the point is we have learned and all of that, all the, all of what we have learned, we still yet have to learn when it comes to R removals.

Peter Zaman (40m 42s):
So removals in my mind are a less tried and tested investible carbon abatement opportunity compared to reductions today for those reasons. But philosophically a reduction is an avoidance of a ton of carbon being emitted. So contrasting that to a removal where a removal is one tunnel already exists and you're trying to take it out of the atmosphere, a reduction is where you're trying to stop that ton from being emitted in the first place. So you, you're really looking at this question from a slightly different spectrum when you're comparing one against the other. If you look at it from a budgetary perspective. So we are told by the I PCC that if you wanna stick to our 1.5 degree net zero goal, we roughly have between now and 2,100 the year 2,100, the ability to burn about 420 gigatons of carbon. And that 420 gigatons as you, you and I have talked about is split between aviation shipping and the rest of the global countries through their NDCs.

Peter Zaman (41m 42s):
So those 420 gigatons, if you think of what a reduction does, a reduction allows us to burn through that 420 gigaton budget more slowly because we are avoiding the emission from going out in the atmosphere in the first place. Contrast that to a removal where what we are saying is that because we are taking one ton out, our 420 gigaton budget just got one ton more that allows us to sort of balance out and what we burn now is one better than the other. I think the answer to that is no. Do we need one more than the other. I think we need both. My philosophy is relatively simple, you know, one ton of carbon reduced today is one less ton of carbon to remove tomorrow and I think that's in its most simplicity, my position on this.

David Greely (42m 32s):
Sounds a little bit like a penny saved. As a penny earned. Certainly makes sense. I wanted to ask you one last question before you go. You know, I feel like with a lot of these conversations, particularly around some of the policy issues and trying to get settled on these terms and the accounting structures and all these important details that make policies and make markets work, sometimes it can feel like the issues are swirling around, like the conversations kind of keep happening without making meaningful progress. So I wanted to ask you, do you feel like these discussions are, are getting a little swirly sometimes or are we making progress and driving to a consensus, to a settled understanding from which we can take meaningful action and if we aren't driving to that consensus or not driving to it fast enough, what do we need to do next to help us get there?

Peter Zaman (43m 23s):
Wow. Talk about ending this with a easy question. Look, I drawn my experiences of carbon markets 1.0 when I answered it this question, which is I've seen it happen before. I know what went right and what went wrong last time around and I ask myself, what are we doing in carbon markets 2.0 that is right and what are we doing that is wrong in a very similar way but the difference is I'm drawing on experience when I make that statement. There's a lot of people out there who are building this market, who are doing this without that experience, right? They're doing it in a vacuum in one sense, and they're not necessarily drawing on the experiences of what we thought did work and therefore should be held onto versus what we thought didn't work that should therefore be improved upon. There is very much of a, everything that went before was bad. It has to be replaced with something else and therefore that's not a good thing and otherwise the a attitude is very much, well we are going to recreate everything from scratch. I don't necessarily feel that those conversations are necessarily helpful. We don't have the luxury of time to throw the baby out with the bath water and start fresh. We just don't have the luxury of that time and removals are great and I think they are needed, but they come at such a bigger price ticket than reductions and there are so much out in terms of investability from a technology perspective and if you will, the gaining of the benefits perspective that we've gotta really think about what can we do now rather than what can we do tomorrow. So in one sense, the removals reductions debate is a little bit about, you know, kicking the can down the road a little bit, because if I take a simple removal example of afforestation afforestation, where I plant new trees today is good, but the tree has to grow to a certain level of maturity. So it's five plus years before it really is leading to any environmental benefit that are tangible in terms of tons removed. So similarly, from an investment perspective, that translates to five plus years before I can get any return. Now, if you are going to the private sector and you're gonna say to them, put your money in so that you can get your money back, they're gonna say, well, what's my, when am I gonna get my return?

Peter Zaman (45m 54s):
What's my rate of return. How do I ensure that my money and my value is protected? And the longer you put out the ability to start recouping that value, the less likely or the harder it becomes for somebody to invest in that and that's kind of where we are insisting and pushing things on the argument that removals are superior to reductions, but for the reasons that we just talked about, I don't necessarily agree with that. So we are trying to allow perfection to be the enemy of, of the good, and I don't think that's a very healthy thing for us to be doing. If our genuine purpose is to try and resolve and meet the 1.5 degree target you know, we can't say we are only gonna support nature-based removals and we are going to ignore carbon capture and storage and other tools available to us that are capable of helping us get to the 1.5 degree journey.

Peter Zaman (46m 35s):
And I just don't understand why we would make that case. But when you talk to most people, they have this very blinkered view that says we can only do nature-based solutions because that's the only thing that I think we trust. We don't trust any of the industrial gas solutions or the geological storage solutions because ideologically we don't agree with that and my point is, you might not agree to it ideologically, but if it gets you to the 1.5 degree target, more likely and increases the chance of you doing that, is that not really the point we should be talking about rather than your ideological superiority of this anybody else's. So I think that's the bit that I really struggle with in carbon markets 2.0. There's too much ideological debate and not enough practical considerations of the reality of what 1.5 degrees really means and how we should get there.

David Greely (47m 35s):
Thanks again to Peter Zaman from HFW in Singapore. We hope you enjoyed the episode. Join us next week as we continue to explore the carbon frontier on SmarterMarkets. We hope you'll join us.

Announcer (47m 46s):

Announcer (48m 27s):
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