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### Carbon Frontiers 2025 | Episode 3

Peter Zaman, Partner, HFW Singapore

**This week on *Carbon Frontiers 2025*, we welcome back Peter Zaman, Partner at HFW Singapore. David Greely sits down with Peter to discuss the impact of the US withdrawal from the Paris Agreement and how the rest of the world's response, whether ideological or pragmatic, will determine the path forward. They also talk about the need for a greater focus on adaptation and managing climate risk in a world where climate action is going to be slower and take longer to make meaningful change.**

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**Peter Zaman** (00s):

So the reality is we have got to live with the Paris Agreement, but have to reinvest in the Paris Agreement and treat it differently in a more user friendly way to enable it to be the tool to achieve both the adaptation growth side as well as the mitigation growth side and we need to do both. We can no longer pretend that adaptation is less important than mitigation. The signs are there, we can't ignore it. We need to do more.

**Announcer** (33s):

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](https://basecarbon.com).

**David Greely** (01m 13s):

Welcome back to Carbon Frontiers 2025 on SmarterMarkets. I am Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Peter Zaman, Partner at HFW in Singapore. We will be discussing the impact of the US withdrawal from the Paris Agreement and how the rest of the world's response, whether ideological or pragmatic, will determine the path forward. We will also be discussing the need for a greater focus on adaptation and managing climate risk in a world where climate action is going to be slower and take longer to make meaningful change. Hello Peter. Welcome back to SmarterMarkets.

**Peter Zaman** (01m 52s):

Hey Dave, thanks for having me back again.

**David Greely** (01m 55s):

It's always good to have you back here with us on Smarter Markets and each year on our Carbon Frontier series we try to give our listeners a sense of where the path forward is in the carbon markets and I think this year that task is as difficult as it's ever been. So thank you for joining us and talking about it and helping us find our way here. And I think the big thing is this year market participants are trying to figure out the path forward in the wake of the recent pullbacks from climate commitments, most notably the Trump administration's withdrawal of the United States from the Paris Agreement. So you know, let's start there. How are you thinking about the impact of the US withdrawal from the Paris Agreement and its impact on the rest of the world?

**Peter Zaman** (02m 43s):

Well thank you Dave. I think for difficulty in this time trying to work out whether or not the withdrawal of the US from the Paris Agreement is more material than their first withdrawal is a bit more difficult. I think the first time they withdrew, people thought Trump coming to power was a one-off, never gonna be repeated. It's we just have to get through four years and we will have a Democrat administration and then it will come back into the Paris agreement and things will be like they were before. I don't know that you can take that view this time around. I mean certainly we know that Trump is already withdrawing the US from the Paris Agreement, but I don't necessarily assume that at the end of his four year period we won't get another Republican administration who is just gonna keep it that way. So the chances of us saying that this is a one-off anomaly, I think are rarer now.

**Peter Zaman** (03m 43s):

Now if you go back to the Kyoto protocol, the US didn't ratify the Kyoto protocol, the US did not participate in the Kyoto Protocol. It had observer status throughout and it never engaged. So the heavy lifting for any advancement of international carbon markets and therefore introducing carbon trading to the world fell upon the EU, Japan and the rest of the world to basically carry forward the opportunities that the Kyoto protocol presented. And I see ourselves pretty much in the same position this time around. And I think going forward the reality is if the Paris Agreement is going to do its job, it will have to do so without being able to count on the US. Now you have got to put also a little bit of the US' role into context when thinking about what this practically means within the framework of the Paris Agreement. And by that I think about the fact that looking at the numbers, the Biden administration is seen to be very positive in terms of environmental matters and in its support for the Paris Agreement.

**Peter Zaman** (04m 54s):

But weirdly enough, if you actually look at the numbers, the Biden administration had peak oil exports for US records during its tenure. So in 2023 we had more oil exports coming out of the US than any time in its history. Same with LNG, you know, there was the amount of LNG coming out of the US during the Biden administration in 2023 was doubled any amount that came out of the US during the Trump administration. So actually, although you could make the case that Trump's going to burn baby burn and dig, baby dig or whatever it is that he wants to do vis-a-vis fossil fuels, the reality is he is already trying to do that at a, at in a circumstance where there's been record exports of fossil fuels from the US during the Biden administration. So he is having to beat a pretty high record already. But interestingly enough, also if you look at the US record for the last 15, the country with the highest amount of GHG reductions, it reduced its emissions or carbon footprint by about 800 million tons over the course of 15 years.

**Peter Zaman** (06m 08s):

Now that's a 14% reduction over the course of 14 years over a 15 year period. Now to put that into perspective, the UK's abatement during that same time is 40%. Now 14 versus 40 makes it sound like you know the UK's done a better job and on a relative basis that is true, but actually in a ton by ton basis the US has reduced more tons than any other country during that period and that's predominantly because the US switched from using coal to using natural gas. So naturally there was an environmental saving there. Now you could make the argument that the energy transition has already been in place in the US for the last 15 years, which of course includes one Trump administration and two democrat administrations at the minimum. So we have got to put the US' contributions to the Paris agreement into perspective and one of the biggest concerns I think that follows from the US withdrawal of the Paris Agreement is in the context of the lack of environmental financial support to the energy transition. And I will pause there because I think that's taking us into a slightly different direction within the, you know, framework of the Paris Agreement itself. But I just wanted to have this conversation by setting the scenes for what the US truly has been doing, at least in reality rather than just on paper before we got stuck into that.

**David Greely** (07m 42s):

And I appreciate that that's such great context to kind of take a step back and realizing all the way back to Kyoto, it's been more the norm for the US not to be backing international climate policies than the exception. And there has been a, I guess unintended consequences, right? Where the US has seen dramatic reductions in emissions over decades and that was driven by the rise of natural gas and the displacement of coal. And now we see with the energy transition so much of the move to electric vehicles being driven by China, really more about energy security concerns than necessarily a climate commitment. So I guess where does that leave Europe, kind of the major economic zone that's really been consciously and with intention trying to reduce carbon emissions. Where does it find itself when it's between the US which is going maybe you could say continuing its own path of pursuing its own energy policy and taking advantage of its natural bounty of oil and natural gas China pursuing renewables because it does not have bounties of oil and gas though still using a lot of coal. Where does Europe fit in in that world?

**Peter Zaman** (09m 04s):

I am going to answer that question in two parts if you don't mind Dave. I am going to start with what we need to do versus what I think Europe can do because what we need to do is actually recognize what the Paris Agreement objectives of 1.5 degree need us to do if we want a 1.5 degree target and in the context of that ask ourselves are we going to be able to do that with the US not contributing or pulling its fair share and therefore where other countries like the EU or regions like the EU collectively can step up to take some of that slack. So that again requires us to think about a little bit of the numbers that came out of the global stock take exercise that happened in at COP 28 in Dubai. Now when you read the global stock take decision, there are a couple of numbers that jumped out at me and I was taken aback by some of these numbers last year when during the Carbon Forward Conference in Singapore, roughly about this time last year, I was asked to do the keynote speech and they wanted me to talk about what does COP 28 tell us?

**Peter Zaman** (10m 18s):

And here is some scary thoughts. So, and I am not making these numbers up, they came straight from the UN global stock take decision. It's there in heart language for everybody to see and basically it says that if you want to meet the 1.5 degree target by 2030, we need a collective global GHG reduction target achievement of 40% and then that needs to increase to 60% by 2035 and then if you are gonna go for 1.5 degrees, you need to get to the point at 2050 where the amount of our global emissions match the amount of our global removals, right? That's your ultimate net zero objective. So remember 40% reduction by 2030. Now when you look at the annual NF CCC Secretariat synthesis of the nationally determined contributions of the countries that have made pledges so far, the last one that came out in Baku or just ahead of Baku said of that 40% by 2030 we are on target to get to 2.6%, right?

**Peter Zaman** (11m 30s):

And that was with a US pledge. Right now of that period between 2025 where we are sitting today and 2030, which is our target, we have three, four years left of a Trump administration. So really we are going to kill all of the 2030 window with pretty much zero chance I think of going from 40% to 2.6%. Now one of the problems that follows on from that is that fatal. No, but it just means the 60% achievement by 2035 becomes 80% achievement by 2035. So all we are doing really is saying to ourselves in order to meet 1.5, we just have to do a lot more later on and we are doing a lot less now today. So in other words, we are putting more burden and more pain upon ourselves. Well that's one way of looking at it. The other way of looking at it, and this is the way I am beginning to sort of accept the reality is that 1.5 degrees is not gonna happen beyond us.

**Peter Zaman** (12m 31s):

I think when we have done previous conversations in the podcast, I have sort of made that point, particularly I think in the podcast we did running up to COP 28, that the reality is we are not doing the things we need to do to be at 1.5 degrees and the criticism at the time I was making of the EU was that they are hardwiring a 1.5 degree climate ambition into their legislative framework at a time when it's looking unachievable nobody else in the world is supporting them and now the US pulling the plug absolutely brings that message straight to the front and center of all conversations around climate policy. So the EU now in that context really now has to think about do I hardwire a 1.5 degree target into my legislation when it's almost impossible for us to globally achieve or collectively achieve and I am doing this alone and I am making it more expensive for my citizens when I am doing it.

**Peter Zaman** (13m 33s):

And when my citizens are picking up the tab because they are being unfairly treated or not unfairly treated, but certainly having to pay more than everybody else and feeling that's unfair, we are then externally exporting those policies to other countries by forcing them to adopt the same pain even though they necessarily are not getting the funding that we promised them over the years, not just us collectively in the Paris Agreement we promised them over the years and it's never arrived. So that takes you quite neatly to the Baku decision that happened in November where people were talking about a new collective qualified funding amount that was due. This is, if you go back to the days of the Kyoto protocol, this was the a hundred billion dollars a year that developing countries were supposed to get to help them under Article 9 of the agreement to sort of fund their decarbonization.

**Peter Zaman** (14m 29s):

Well we know 100 billion never materialized within the 2020 deadline and now they were we going to set a new target and the new target is 300 billion by 2035. Now you have got to remember this is in the same Baku decision that acknowledges that we need 1.5 trillion to fund the NDC activities that have already been commissioned. By the way, those same NDC up activities are only taking us to 2.6%. So really the number that we are giving out the developed country's obligation to fund the decarbonization of the global south, the number we are giving out on the basis of public funding to help them with their decarbonization more than inadequate and it's literally a drop in the ocean in the scheme of things. So we are not able to fund the global south energy transition so we can't expect them to take the burden. So then you get back to this question, well if the US is not taking its burden, the Europe has a burden, which frankly its citizens aren't willing to afford, are we realistically going to say and insist that we are going to commit to 1.5 degrees?

**Peter Zaman** (15m 42s):

It seems to me that if you think about this rationally, if you think about it dispassionately and you think about it logically, we do not have the time and we do not have the will and we do not have the money to achieve 1.5 degrees, not without there being a massive shift in global support for achieving 1.5 degrees, which has to come from the private sector and we have not seen the private sector engage as it should. And when it has engaged, we have seen ideological debates around what is an appropriate ton and how much environmental integrity should be attached to a ton versus not to about the ton in the voluntary space being used to whip anybody who is trying to bring the private sector in and we can turn to the role of the voluntary markets maybe a bit later on but going back to

your real question which is what does the EU do I am afraid the EU has no choice. If the EU wants to continue with the Paris Agreement and if it wants to support and reinforce global efforts, it's going to have to step up and take the lead like it did in the Kyoto Protocol. But it cannot do it from a position of unrealistic unaffordable ideological positions, which it then forces down other people's throats, which has generally speaking, been its position up till now.

**David Greely** (17m 10s):

If they can't operate from a position of power, then they need to operate from a position of influence. How do they influence others around the world to continue to pursue some of these climate goals? Like the way you laid out the numbers, it's very clear, it's unrealistic. I mean many would argue that we have already passed 1.5. So to continue to have that as a target seems magical thinking to a certain extent and a 40% reduction in four or five years, given that we've only had about 2% so far also seems like magical thinking and at the same time you see many countries in the global south trying to move forward needing financial assistance or just simple carbon financing to move forward, that's becoming more difficult. Is there a way for Europe to extend some of its influence? I know when we were speaking with Mark Lewis a couple of weeks ago, he brought up the notion that the EU is going to need to allow foreign offsets into the EU ETS if they are going to have a hope of remaining competitive and meeting climate goals and on the voluntary side of the market for years people have been clamoring for some well-regarded entity to say what's a good offset and what's not a good offset? And it seems like there is room here for maybe the EU if it starts to take in some of these types of offset units or credits from projects in the global south to be that leadership. Do you think there is any appetite there or would that even be worthwhile?

**Peter Zaman** (18m 58s):

The EU basically has a very little choice because the Baku decision forces you to engage the private sector in funding the energy transition. The public money is not going to cut it and therefore the question is how do you engage the private sector to support the energy transition? The cost of decarbonization will be directly relevant to this point. International emissions trading has always been founded on the premise that the cost of decarbonization is not even across the world. You know, reducing a ton in Africa is cheaper than reducing a ton in Europe and therefore it makes sense to bring the African ton to Europe and let Africa benefit from some of the climate finance that follows from the payments that the EU makes for that ton because both are benefiting, the EU is reducing the cost of its decarbonization. Africa is getting funding to help it avoid emissions.

**Peter Zaman** (20m 07s):

That would have happened because it wanted to burn coal and therefore this is maybe funding renewal energy instead, right? So the idea of international emissions trading, particularly when you are looking at importing carbon offsets from cheaper abatement sources is a win-win for both. Now if you look at the practical reality of the Paris Agreement, it's an intergovernmental arrangement. They don't invite the private sector to have a voice. They don't have a role in it, not in a formal way in which the Paris Agreement framework works. The only way we can get to the private sector engaged within the Article 6 framework is via Article 6 right? So if you want to get the private sector board, you have got to get Article 6 really moving now on paper, we have now fully operationalized Article 6 as a result of the sort of upgraded Article 6 decision that we got in Baku.

**Peter Zaman** (21m 08s):

The reality is going to be two years before Article 6.4 is really humming and streaming the way we would like it to be and that's delayed. The Paris Agreement was agreed in 2016. Theoretically the conversation we are having about the state of play of the Article 6.4 mechanism we should have been having that conversations in 2017 and 2018. Here we are in 2025 at the start of that journey and the reason that that has not happened is because of the EU and it's because the EU basically took a view that said we do not trust Kyoto Protocol units and therefore we have no reason to trust Paris Agreement units. We are not going to support it. That's an ideological choice that it made and if it continues to take that line and therefore does not embrace Article 6 there is no other foundational means other than the voluntary markets through which funding can move from the global north to the global south.

**Peter Zaman** (22m 11s):

Within the Article 6 framework, within the Paris Agreement framework, Article 6 is the only way to do it and as you say, up till now the EU, the UK, certainly the US before they withdrew, had taken the view that they are not going to buy Article 6 units. In other words, they are going to decarbonize locally. Now decarbonizing locally is fine, but it's costly and that means you are passing the cost onto your electorate and the ideological opposition to carbon offsets that has led you to impose the cost on your own citizens for this domestic decarbonization efforts is ideologically wonderful, practically too expensive to do and the problem you then have is that you get the sort of political pushback that we are seeing across the spectrum in the EU. The biggest fear for the centrist parties in the EU today is that their own environmental policies is making them unelectable.



**Peter Zaman** (23m 14s):

And certainly when host, immediately after the Trump inauguration, the great and the good of the world met in Davos, the EU was told that message very, very loudly and they came back and they said, we hear you now we hear you and we are going to do something about it and we are seeing that happen very, very rapidly. But it's happening in a, what I would describe as slightly haphazard way. It's almost as if we are going to go from, well take CBAM, we have got a CBAM policy out there, theoretically it's there to protect European industry. We overnight suddenly drop 80% of the compliance entities or reporting obligations that exist today from CBAM. Now that's definitely reducing the burden. There is no question about that. But the theory of actually what you are doing there is you are saying there is a de minimis quantity of people who are unfairly burdened by what we have done and therefore we are gonna continue to make it relevant for the top 20% of industrial producers in the EU.

**Peter Zaman** (24m 24s):

And they still have that burden and by the way, whatever that burden is, it's still a cost we are exporting to the rest of the world. So in terms of net, what have you done? You have pacified your crowd locally, but the actual consequences of what you are doing, which is to pass on the cost to other countries who are exporting those products to the EU, you still maintain that. So the EU allowance price still stays where it is and it still gets passed on to other countries as an incentive or a penalty or as a stick to make them do something. So now you are at the point where you are saying, yes I have reduced the burden on CBAM reporting obligations, but has it really changed how other countries view the effect of CBAM? The answer to that would be a no, not at this point. So I think whereas the EU is going about desperately trying to change its position, it's not really moving away from the foundational things that it's already put in place, the EU green deal, the fact that they had three reporting regimes and now they are combining them into one regime. Okay, that makes sense and it reduces the burden but you are still not abandoning the reporting regime. So the question of how the EU goes about doing this and how welcome it is to Article 6 units is going to be foundational to the question of whether or not the rest of the world sees the EU policy position as being a repackaging of what it already had or whether or not it's really going to be a welcome change back to this more environmental centrist policies that we have historically known the EU to represent.

**David Greely** (26m 06s):

Heard you use the word ideological quite a few times and that seems like the moment we are in is do we do each side hold to ideological purity or do they look for pragmatic progress? Feels like can't let the perfect be the enemy of the good type moment and you know, it brings me back to the last time we talked where, you know, it was shortly after Science Based Targets Initiative, SBTi, they reinforced their relatively hard line restrictive stance on the use of carbon credits to meet, meet corporate net zero targets and also at the time described carbon credits as being mostly ineffective. Where last time we talked about, you know, how would that play out taking such a, an extreme stance on a broad market. Now just in the past few weeks, the Bezos Earth Fund directed by Amazon founder Jeff Bezos and one of SBTi's largest founders since it was created in 2015, has stopped funding SBTi.

**David Greely** (27m 10s):

Now part of that is likely the political moment partially probably also a reaction to some of the ideology. At the same time, you know, I was talking with Alasdair Were on the podcast last week and this might have been a conversation around it rather than on the podcast I was asking him about how corporates were responding in this moment and he said, you know, quite a few are still going forward and I am like, well what's the rationale they give? It's not politically, there is not a lot of pressure for them to do it. Stakeholders might not be putting the pressure on and he said one person kind of summed it up said, well if you drop a piece of trash, you pick it up right and so there is also this cultural ethical norm that's so powerful when you see, obviously it's a complicated, a lot of complicated issues when you look at the corporate world, you know, where do you think they are kind of shaking out on all this or are they still trying to figure it out?

**Peter Zaman** (28m 07s):

When we did talk about SBTi and their position last summer, I think if you think back to the fact that that conversation took place about seven, eight months ago and you say, well what's changed on the SBTi's position between then and now besides Bezos pulling its money and you know, there has been a change of CEO. I think the only other thing that's happened is very, very recent. I mean we're talking about in the last sort of 48 hours, SBTi have put out new position papers where it seems like they are softening their position when it comes to the use of offsets, but not in a really relevant way. So before they would say that only at the very end of your corporate commitment period. So if you have a commitment to achieve net zero by 2045, for example, only towards the end of that period can you use removals and that's a limited cap of 10% of your unabated emissions.

**Peter Zaman** (29m 07s):

And that's been their position pretty much from day one. And now we are hearing them think, well alright, we need more removal so maybe we make that an incremental target so people can use more removals in the short term. Now I think my reaction to just that particular policy change and do I go and celebrate that it's probably different from other people's because I say, well hang on, the science is saying forget 1.5 degrees. The science is saying you even if you want achieve a two degree target, there is huge amount of emission reductions you have to achieve now and you have to deliver those emission reductions. This is that 40% by 2030, 60% by 2035 numbers, right? All of those numbers, you have to deliver all of that. And when you eventually get to the point where you want it to be net zero, whether that's a two degree net zero or a 1.5 degree, net zero is a timing factor, right?

**Peter Zaman** (30m 07s):

If it's 1.5 degrees, that has to be 2050. If it's 2 degrees, it's probably 2070, right? So let's take a 2070 timeline as an example because I am being more realistic that two degrees is where we are heading. So by 2070 we need to match the amount of removals with our unabated emissions, unabated unmitigated emissions. So if you don't have reductions between now and that point then the amount you're gonna have to remove is just that much greater and yet we know removal technology is the most expensive right now compared to reduction opportunities. And even if I take removals, there is industrial removals which are considered to be thousand years permanent, which are much more expensive, estimated at a thousand dollars a ton right now and you have nature-based and what do we see from a policy perspective? We are going to decry the cheaper, more immediately available removals using nature base and we are gonna ignore them because they are not permanent enough and we are going to spend a lot of money that we can't afford and the rest of the world certainly can't afford.

**Peter Zaman** (31m 26s):

And we are going to force that down people's throats because we are taking this view that we have to have something that's really good in a thousand years time years. My view is frankly in two generations my grandchildren may not have a planet to live on, let alone a thousand years later having a planet to live on because of the actions we are failing to take today. So if the science is saying to us we have to reduce our emissions, why does a organization that calls itself science-based ignore all of that and not support the reduction effort? Why does it not encourage the corporates in its reduction efforts? You can have a conversation about whether or not you limit it to very high grade, high quality reductions. We can have that conversation, but they're not having that conversation. They are simply saying, not going to happen, we are not going to use it and that has to be ideological in my mind because you cannot call yourself science-based and ignore that what science is telling you that we need to do. So if that is an ideological, I don't know what is

**David Greely** (32m 34s):

My head's still spinning because you mentioned 2070 and I think that'd be my hundredth birthday. So we are talking on some pretty extended timeframes here, Peter. But yeah, when you look around, whether it's your clients or some of the incremental moves you are seeing policy makers make, I know it's very early. We are months into this kind of new administration in Washington and this kind of shift globally and attitude. I feel like the positive of this would be if we are forced to inject some more pragmatism into our discussions of climate and carbon and how we want carbon markets to work. The negative would be people just walk away from climate commitments and carbon financing altogether. What's your early read? Which direction do we seem to be going? Just the complete walkaway or let's try to do something.

**Peter Zaman** (33m 26s):

I mean to a certain extent of, of portrait a relatively negative picture, haven't and I think it's negative because I am just looking at the numbers and looking at the reality. I am looking at the direction of travel and I am thinking about my grandchildren and I am thinking, I am not doing enough. I am just not doing enough now while I can be to make a difference. And actually if every corporate thought that way, we would have a completely different picture problem. I think for corporates now are, on the one hand, they don't have a strong guide and I don't include the SBTi amongst them. They don't have a strong guide that gives them a balanced, logical and commercially reasonable route to follow and therefore they either walk away from SBTi and have no viable alternative to step towards and therefore go and do everything on paper but not with a lot of transparency and not with a lot of third party audit and make a lot of noise that maybe is good for a sound bite but not necessarily coordinate and not necessarily effective.

**Peter Zaman** (34m 40s):

Or you take an organization like SBTi or come up with an alternative to SBTi that does take a more realistic reasoned commercial, but at the same time appropriate stance on how decarbonization works and you gather around that and you sign up to that and I think if you could do that, the corporates will feel more comfortable and more confident. The reality is though we are not giving them a proper

alternative and even if we gave them a proper alternative, you have political influences like the whole anti ESG environmental woke arguments that are coming out of the US that start challenging that most corporates will probably say to you by analogy to your comment about if you drop litter, you pick up your litter is that most companies will do that. Many companies will do what they are forced to do. Few companies will do what they can do, but many companies won't do what they don't have to do.

**Peter Zaman** (35m 51s):

Now the question is, what percentage of corporate behavior do you attribute to each one of those segments? My experience of 20 plus years of working in environmental markets is that people do what they are forced to do and if you don't force them, it's not going to happen. Which then tells you that in the wake of the US withdrawal if you will from a legislative framework driving corporate behavior towards better sustainable practices or more environmentally positive practices I think the danger is that we don't do enough. But if you do believe that you need to do more, you need to be doing so from a position of pragmatism and I think it's a bit like my point about 1.5 degrees versus two degrees, 1.5 degrees is a lovely ideal, but nobody's doing the pragmatic things that are needed to get to there. So the reality is we are in a two plus degree world.

**Peter Zaman** (36m 58s):

Now, whether it's 2.5 degrees, 2 degrees or 3.5 degrees makes a huge difference to us. You know, you don't have to look very far to begin to see the more extreme environmental consequences when they happen and the impact that they have on asset values. I mean, most of LA got wiped out in wildfires. There are parts of Spain and Germany and Europe where you're still recovering from the impacts of extreme unexpected floods last year. The loss in asset value itself is going to start increasing, which means that we are talking about having to learn to adapt to more extreme weather patterns, more extreme losses, and we are not really doing much in the adaptation space and that's because we are not being pragmatic. We are basically in denial mode to say, oh no, no, we'll still achieve 1.5 degrees. Net zero is still going to happen even though we are not doing anything about it.

**Peter Zaman** (37m 57s):

And at the same time, because we are not admitting we are not doing enough about it, we are not doing enough in the adaptation side to deal with the consequences of what seems to be almost inevitable. Now we are doing the worst of both things. We are neither being honest nor being pragmatic and more importantly, we are not actually doing what really needs to be done for us to do and build a resilient planet for what seems to be the way things are going. So do I feel positive? No. Do I think it's all doom and gloom? No. But do I think we have the right people doing the right things? Not yet. You know, you can't, on the one hand go around shouting green washing for four years and then suddenly turn around and say, oh by the way, that's fine. You can't have both. You making the point that all carbon offsets a rubbish and they are all tarnished by something or the other, and then overnight suddenly say, these are fine for me.

**Peter Zaman** (38m 57s):

There has to be just the way, there has been a messaging that has led to that conclusion. There has to be a messaging that justifies why carbon offsets will be good if we use them. And there are plenty of reason that a three be good, they will be good because we want to use them as a means to support the energy transition for the global south. There are plenty of reasons why we want to support it because we need voluntary markets. If the Article 6 markets don't do what they're supposed to do, there are going to be instances where Article six will be considered the high watermark, high benchmark of quality and therefore, by definition, there are certain activities that won't be funded by Article 6 . Well, if you are a corporate and you support that activity, then that's one way of contributing towards the decarbonization effort in other countries.

**Peter Zaman** (39m 48s):

And that's why voluntary markets are needed. Now you then get to the point where you say, well if a corporate is going to get beaten up for doing that, then that's not good. So we have got to get this balance right between what it is we want. We can't say we want perfection in circumstances where perfection leads to the doom of our planet. And I have been making this point for years now, and I am hoping that people will wake up and suddenly realize what the consequences of their choices are. And if we can get people to come back towards the logical center view of we want to make a difference, we have got very little time in which to do that and we now have to change direction in order to ensure that happens. If people take those three driving principles in, if influencing the choices and decisions they make, the world looks very different. But we have got to bring people back to that position and at up till now we have been pushing them away from that position, we need to bring them back. If we don't, I think it's gonna be very difficult.

**David Greely** (40m 55s):

And perfection is a word that we really need to wrestle with, right? Because there is always a reason not to do something and what we are going to find is that we have to deal with the consequences of our own inaction and I feel like on both sides of the ideological spectrum, you see this demand for unreasonable levels of precision. Is human carbon emissions affecting the climate and raising the temperatures? We know enough to say yes. Can you describe everything that happens in a global climate system and predict perfectly? No, but you know enough to know that, that it's something that you need to take into account. Is there a magical carbon offset out there somewhere that will meet every level of integrity out to a thousand years? No, not that anyone could afford or scale, but do we know how to do enough things well enough to make a difference?

**David Greely** (41m 52s):

Yes, difference. And so I wonder, there's the ideology, there is the perhaps overthinking it. You know, have been around these markets a long time. It seems like we know enough that it's time to choose whether we are going to act or not act. Sometimes it feels that we keep wanting more information to come in. Oh, when we come up with this next thing, then we will really understand how to assess a quality of a credit and get integrity just right. Do we need to learn more or do we know enough to do or at least make a start in what we need to do?

**Peter Zaman** (42m 30s):

I think I have made this point before when we've had this conversation about where we've been in our journey on valuing mitigation as an example, right? So if you take the fact that in our journey of valuing mitigation for 20 years, we have reached the point where all we can do is talk about how bad it's without offering a good positive alternative that is affordable and I am making the point the removals today are not affordable. Then I think you have to get back to this point where you say, well what is good enough? It's not going to be perfect, but is it good enough and is it having a positive environmental benefit? And if the answer to that is yes, it's having a positive environmental benefit, even if it's not a 100 on a 100, but it's only 90 or a 100 or 70 on a 100, I think you have got to take that because the alternative is we are doing nothing and doing nothing is not an option.

**Peter Zaman** (43m 25s):

So when you now start applying the principle of sort of what we can do, how do we move forward and the speed at which we move forward, I think we have got to move forward in a way that says we have got to do more than we are doing. We have got to accept that perfection is the enemy of the good. We have got to recognize that there is a cost to abatement that we have got to factor in to make it more economically viable, not just for the developed countries, but also for the developing countries and we cannot hoist onto developing countries issues and cost factors that can only be afforded or barely afforded by the rich countries. Because if you do that, you are going to hold back ambition, you're gonna hold back climate finance and you're going to take us to exactly the position we don't want to be in, which is that where climate temperatures go completely out of control and you see extreme consequences that follow from that. We spent 20 years trying to work out how to value carbon because that allows us to fund mitigation. We now accept. I think we should accept that in a post two degree world if we don't have a way to fund adaptation we are never going to be able to deal with the consequences of what the value of the adaptive steps are going to be. So how do you fund the adaptation? At the moment, the best we have come up with is concessional loans and grants and that basically is what the public sector can do. The private sector doesn't believe in concessional loans and grants. If they do, it's coming out of a charity and there's a limit to how much charity there is out there. So if you start thinking about what are the tools we have to fund adaptation in the private sector, the answer is we treat it just the way we treat any other commercial financing, which means we are looking for a return. Well, there is no return. It's an avoided loss.

**Peter Zaman** (45m 30s):

You know, you taking steps to build sea defenses, which prevent the coastal area from becoming underwater aquariums is the savings to the people who live in that area because the asset value has just gone from 100 million down to zero, or by doing your steps, you have now retained it at a 100 million. It hasn't gone from a 100 million to 120 million, it stayed at a 100 million because it was going to zero. Now, how do you value the avoidance of a loss to fund activity to build a sea wall? Well, the government knows how to do it. It's raising government bonds and getting, using the government's credit rating to borrow against that. But how does the private sector do it? That's the real question we don't have an answer to and if we don't have the answer to that, we are never gonna scale adaptation. We are going to wait around for the governments who are all broke to come and find the money and fund it for us.



**Peter Zaman** (46m 27s):

And if they don't fund it quickly enough and they don't do it well enough, we lose the value of all of our assets. So we are looking to the government to bail us out again, and the governments don't have the money to bail us out again. So if we don't engage the private sector and adaptation funding, that's also not going to be great for us. But we haven't done anything on that. We have just been living in this world where we say, our adaptation funding not going to be a problem. We are going to hit 5 degrees and therefore let's not worry about it. The reality is we should worry about it. We need to do more.

**David Greely** (46m 59s):

And adaptation's a fascinating place for us to kind of finish up today, because as you move into the 1.5 world, it's interesting, you go back to the beginning of a lot of the talk on putting a price on carbon, and it was about, well, what is the social cost of carbon right and they had a lot of people putting together work to estimate, well, what is the cost if we get to 1.5 or 2 and now we are beginning to experience some of that. So you see increased climate risk, you see wildfires in California, you see increased hurricanes in the US Southeast. You see the floods that you mentioned in Europe happening more frequently and being more damaging to property in those areas and so are we moving into a world where the cost of carbon starts to become much more measurable in a way, and something that needs to be managed. So I guess I am curious, as we haven't been able to get carbon markets and carbon policy to move quickly enough, and if we are moving into a world where climate action is going to be slower and take longer to make meaningful change, does our path forward require a broader focus on managing climate risk and a broader build out of environmental markets that can help price adaptation, can help price, weather related damages? How do you think we need to be preparing for a world of increased climate risk?

**Peter Zaman** (48m 32s):

I think this goes back to my point about accepting the reality because it's because we haven't accepted the reality. We haven't focused on what we need to do and because we haven't focused on what we need to do, we haven't applied ourselves to the fullest extent possible to determine solutions for financing adaptation as an example. Now in the mitigation space, like you say, we know how to price carbon today, but we don't have a universal price for carbon and we have fragmented markets, we have illiquid markets. The price of carbon is sometimes considered a dirty word because it means that you are now asking your citizens to recognize the cost of the impact of their environmental footprint and these are educational matters, these are matters of policy, these are matters of politics because in an elected world, when you say to people that they are going to have to pay for the cost of their carbon footprint, they would rather not.

**Peter Zaman** (049m 29s):

And certainly I think Donald Trump would like to say to most of his citizens that he is not passing on the cost of that carbon to his citizens and his citizens will probably say, well, given everything else, that's not a bad thing for me. You know, I would rather save five bucks in my pocket than spend it on something that I can't see, can't feel and as far as I am concerned, doesn't affect me. But the reality is, it does affect you. It might be that you don't pick up the tab today, it may be your next generation that picks up the bill, but the bill is coming and the bill is coming badly. I think the bigger interesting debate now is how does the Paris Agreement evolve itself to be useful for achieving whatever it is we can achieve, whether that's two degrees or maybe 1.5 degrees, and how is it we reinvent in a very positive collaborative way, this platform to achieve what we need to achieve even in the adaptation space better than it has been?

**Peter Zaman** (50m 36s):

We've, it's the only tool we have. We abandoned the Kyoto Protocol in 2009. Essentially when Obama said, we are not going to have Kyoto 2, we are going to replace it with the Paris Agreement, or something like the Paris Agreement and we spent 10 years doing nothing while that was being put in place and brought into force, which only happened in 2021 and now if we would we are going to replace the Paris Agreement because it's not doing what it needs do, all we are doing is kicking that can down the road again and that is definitely not something we can afford to do anymore. So the reality is we have got to live with the Paris Agreement, but we have to reinvest in the Paris Agreement a way and treat it differently in a more user-friendly way to enable it to be the tool to achieve both the adaptation growth side as well as the mitigation growth side.

**Peter Zaman** (51m 01s):

And we need to do both. We can no longer pretend that adaptation is less important than mitigation. The signs are there, we can't ignore it. We need to do more, but we can't just do it on the basis of public funding. We have got to use the leverages of the private sector to enable this to happen and asking the voluntary sector to do it, I don't think is gonna get us there. I think we are going to have to legislate it and whether that's coming down from Paris agreement or whether that's coming down at the country level or to the level

of the EU as a block, I think it's going to have to be done and if we don't do it and we don't do it rapidly, we are looking at a pretty dismal picture in the future.

**David Greely** (52m 19s):

Thanks again to Peter Zaman, Partner at HFW in Singapore. We hope you enjoyed the episode. We will be back next week with another episode of Carbon Frontiers 2025. We hope you will join us.

**Announcer** (52m 32s):

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