

## SM131 | 7.22.2023

### Summer Playlist 2023 | Episode 1

Guy Turner, Founder & CEO, Trove Research

**We kick off our Summer Playlist with Guy Turner, Founder & CEO of Trove Research. SmarterMarkets™ host David Greely sits down with Guy to discuss what's happening in the voluntary carbon markets and the research that Guy and his team are doing at Trove to help us push past the rhetoric and better understand the reality of how carbon offsets are being used.**

---

**Guy Turner** (00s):

There's still this appetite in the corporate world to protect nature. You know, that climate is burning at the moment. We are nearly off the charts in the first half of this year for global temperatures and air and ocean temperatures. You know, we are nudging up to the one and a half degree target that the scientists said was the start of a tipping point that we needed to try and avoid. So I think, you know, this is not lost on the world. It's not lost on governments or corporates. So corporates are concerned and they are trying to do stuff. They're just trying to avoid the pitfalls of, you know, reputational pitfalls of buying something that may come back to bite them.

**Announcer** (00:30):

Welcome to SmarterMarkets. A weekly podcast featuring the icons and entrepreneurs of technology, commodities and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together, we examine the questions: are we facing a crisis of information or a crisis of trust, and will building Smarter Markets be the antidote? This episode is brought to you in part by Base Carbon. It's time to get serious on carbon. Learn more at [basecarbon.com](https://basecarbon.com).

**David Greely** (01m 11s):

Welcome to our Smarter Markets Summer Playlist 2023, where we're sitting down with our special guests midway through the year to talk about where we are and where we might be and need to be heading next. It's our beach reading and a podcast. I'm Dave Greely, Chief Economist at Abaxx Technologies. Our guest today is Guy Turner, Founder and CEO of Trove Research. We'll be discussing the research that he and his team are doing at Trove as we try to push past the rhetoric to better understand the reality of how carbon offsets are being used and what's happening now in the voluntary carbon markets. Hello guy. Welcome to Smarter Markets.

**Guy Turner** (01m 48s):

Hi David. Nice to be here.

**David Greely** (01m 50s):

Yeah, I really wanted to thank you for joining us today. I think it's fair to say that it's been a tumultuous start to the year in the voluntary carbon markets. It began, of course, with the articles by the Guardian alleging that more than 90% of the rainforest carbon offset credits issued by Vera are worthless. There's also the lawsuit against Delta Airlines alleging that its carbon neutral claim is false and misleading because it is using carbon offsets as part of its strategy. These allegations really cut to the core of the integrity of the voluntary carbon markets and their role in helping us reduce carbon emissions. But the question of course is are they true? And that's where I'd like to start our conversation today with you Guy, and perhaps we should cut right to the heart of it, which is green washing. Now, these allegations are representative of the view held by some that carbon offsets have no place in getting us to a net zero world, but are simply a way for companies to claim that they are taking action to reduce carbon emissions in their supply chains without actually taking action to reduce the carbon emissions in their supply chains.

**David Greely** (02m 53s):

You and your team at Trove have done the work of collecting the facts and the data and doing the research. So I was hoping you could start us off by walking us through how companies are using carbon offsets today. Is it green washing or is it for real?

**Guy Turner** (03m 08s):

Yeah, thanks. Thanks, David. Yes, it's a very topical question. When we get, we see a lot of commentary on in the media. So we've been collecting data on company climate performance, tens of thousands of companies, their targets that they've set themselves and also their use of carbon credits amongst the whole range of other things we do and we started looking at this question about six months

ago, and yeah, the hypothesis from a lot of observers was that companies were trading off internal emissions with buying carbon credits or, or offsets. So if they were buying offsets, they weren't reducing emissions internally as fast or if at all and you know, you can see the economic logic to that, you know, dollar spent, there is not a dollar spent there. So we collected, we put all our numbers together, we looked at the emissions performance of about 4,000 firms over the last four years, and then we segmented out four or 500 of those that have used carbon credits.

**Guy Turner** (04m 08s):

And we ran, you know, we ran sort of proper statistical tests to test this hypothesis and we actually came out with a very startling finding was that on average, on average, not all companies, but on average, the companies that were buying carbon credits were actually had better carbon emissions performance than those that didn't buy carbon credits and it was a sort of a puzzling finding. In fact, it was like the companies that were buying carbon credits were decarbonizing twice as fast, so 6% per year compared to 3% per year for the companies that weren't. Now, those are averages and median values and there are distributions around that. So there are companies that are buying carbon credits that are not decarbonizing as fast as they should, and there are companies that aren't buying carbon credits that are decarbonizing faster but on average, and we tested this with statistical, you know, with statistical significance, we looked at it by geography.

**Guy Turner** (05m 00s):

We also looked at it by industry sector, by and large, those, those conclusions hold and that's just to us that there is not a dollar for dollar trade off. It's not like there's one pot of money that they can go to and say, if I buy a carbon credit, I'm not gonna spend it on internal mitigation. And this is a correlation analysis, not necessarily causation. So we had to sort of have, we had to sort of like creatively think about what the reasons for this are, but one, one of them is quite obvious, which is if I'm now putting a price on carbon and I've got to, then I've got to spend, you know, x millions of dollars on buying carbon credits, I'm gonna work harder to reduce my emissions so that I have a smaller liability. The other one is sort of coming at it from the other way round, which is that the companies that are buying credits are already taking climate change seriously.

**Guy Turner** (05m 38s):

So there's like it's a like a contingent sort of action and the ones that aren't buying carbon credits really aren't doing much about carbon and climate anyway, whatever the reason, it sort of refutes the allegation or the accusation that companies that are buying carbon credits are using it as an alternative to decarbonizing. Now there are gonna be companies out there and the, the ones that I think we need to, you know, call out are the ones that are increasing emissions, doing very little on trying to abate their emissions and buying dodgy low quality carbon credits that unfortunately do still circulate in the market and call those out and put the other ones on a pedestal and really sort of draw attention to the companies that are doing really good stuff. They're working hard, they're investing lots in reducing emissions and they're offsetting their emissions as well and I think we, we lack currently the tools to be able to draw those distinctions.

**David Greely** (06m 24s):

We do. And just to clarify one of the points you made when you said that I believe that the companies that are using carbon offsets are decarbonizing on average, I think about 6% faster than others, is that decarbonizing their own supply chains 6% faster or their overall effort, including the offsets?

**Guy Turner** (06m 44s):

It, it is gross emissions, so it's not net of emissions. So that would be just circularity in the equation but it is only scope one and two, so that's their direct emissions from fuel use and their electricity use. So we don't include scope three in the emissions performance calculation for that, for the, for the sectors that that we looked at. We also excluded oil and gas and the reason for that was are they trade a lot of carbon credits as well as buy them for their own use and we didn't want to get mixed up in, in the analysis that, that we couldn't disentangle. So those are the two sort of qualifications. We also put thresholds in there. So we said, you know, you had to be a material user of carbon credit, so you may, it had to be at least 5% of your carbon footprint. And we ran loads of sensitivities on them on the modeling as well to try and sort of sense check our assumptions.

**David Greely** (07m 30s):

That's great. So it's gross. So it's their actual emissions and then they don't get the credit in that 6% for any offsets.

**Guy Turner** (07m 36s):

Right, right and the ones that aren't buying carbon credits, the median, the median performance was 3% per year. So that's an emissions reduction per year figure over the last say four or five years.

**David Greely** (07m 48s):

Well, that's a really big deal that, you know, I think the hypothesis that what you're seeing in the data is that those that are taking it more seriously are taking it more seriously and they're using both tools at their disposal and the other hypothesis that having a price on carbon at least internally can really help drive behavior. I think it's really interesting and glad you've done that work and the research going through, I think you said 4,000 different companies.

**Guy Turner** (08m 12s):

I think there's, there's another point to that as well, which is this budget issue. So I think that if the hypothesis was that there's a fixed amount of money for decarbonization, that you can either spend it on offsets or mitigation, I think that assumption is also challenging and actually I think the, the budget that is elastic, it's variable you know, you can go and find more money that's from the marketing budget and spend it on carbon credits. That's not gonna come from the same budget that you could spend on internal, you know, energy efficiency or renewable energy project. So I think there's, that's, that's another factor that plays into it.

**David Greely** (08m 44s):

That's interesting and you know, as you said, we should probably be shining a light on the, a negative light on companies that aren't taking it seriously, but shining a positive light on those that are, are doing the work and taking it seriously and making an impact but I wanted to ask you a lot of the criticism and the obviously lawsuits could make companies want to rethink their use of offsets. Reducing carbon emissions comes with a cost. That cost is largely taken for the benefit of supporting a carbon neutral or net zero claim and the attempts to discredit these claims this year, you know, how big an impact are they having on the voluntary carbon markets. Do you have some metrics on how much it's reducing the use of the markets or the price of the carbon offsets?

**Guy Turner** (09m 28s):

Yeah, so the numbers that we collect look at the amount of carbon credits being used by companies in the first, the first half of this year. So this, all of this, you know, these criticisms were sort of surfacing at the end of last year. Q1 this year, retirements is the use of carbon credits by offset is down 9% compared to the same period of the first half of last year. So there has been a contraction. I think it's, I mean this is also in the face of some fairly significant economic challenges as, as sort of interest rates are going up in, in most OECD countries, inflation is very high, profits are being challenged, stock markets are down. So you know what the baseline sort of expectation would be is questionable as well. But yeah, retirements are down 9% from H1 last year.

**Guy Turner** (10m 15s):

There's no getting away from that. A lot of that contraction actually comes from five companies. There are three airlines, Delta Easy Jet and JetBlue in the US which have counted for quite a lot of that 9%. And also carrying a Nestle carrying own Gucci and those have quite big users of carbon credits and and really like the association with that. Now they've restarted to, they've said they're going to remove themselves from the market until the quality issues can be resolved. So yeah, it's, but it's, you know, this is a nine, 9% drop. It's not catastrophic. I think my stock portfolio is down more than 9% from when I last looked at it a year or two ago. So markets can go up and go down as well.

**David Greely** (10m 56s):

Right. I'm curious, is it having an impact on the price where carbon credits are trading?

**Guy Turner** (11m 01s):

Yeah, now in the voluntary carbon market, one can talk about a price, but there really isn't a price. We can calculate a volume weighted average price, and that is sort of stabilizing really, but it's a basket of other project types and there's been a bifurcation in those underlying project types. So certain project types like the Guardian had you know, the, the 90% sort of figure about red, which is reducing emissions from deforestation, has shied a lot of people away from doing those kind of projects. Meanwhile, planting new trees, be it on land or in mangroves on the coasts have seen record high prices and so there's still this appetite to, in, in, in the corporate world to protect nature, you know, that, that the climate is burning at the moment. We are nearly off the charts in the first half of this year for global temperatures and air and ocean temperatures.

**Guy Turner** (11m 51s):

You know, we're nearly, nearly nudging up to the one and, you know, we're nudging up to the one and a half degree target that the scientists said, you know, was, was the start of a tipping point that we needed to try and avoid. So I think, you know, this is not lost on the world. It's not lost on governments or corporates. So corporates are concerned and they are trying to do stuff. They're just trying to avoid the, you know, the pitfalls of, you know, reputational pitfalls of buying something that may come back to bite them.

**David Greely** (12m 15s):

Right and I wanted to ask you what I've heard from some of those who are against the use of carbon offsets. You know, sometimes when people like yourself put forward data about the quality of the offsets, how they're being used, how they're being monitored, the response will be, well, we don't trust the data. Is there a reasonable basis for that as, you know, someone who's runs a research team and is spending a lot of time trying to pull together strong data?

**Guy Turner** (12m 42s):

Well, I always trust the data that we collect and we're very transparent in all of our sources and assumptions and our modeling and you know, where we put quite, where there are question marks over the sources, we'll, we'll flag it. So I think it depends on what data you're talking about. I mean, I think a good example, right, just, just sort of, if we want to bed this conversation down into a sort of a concrete example, cook, cook stoves in Africa, they're great. There's a lot of, there's 3 billion people in the world still using wood in open fires in domestic situations to cook food and that's bad because it uses a lot of wood. There's tree harvesting and, and also bad for health and also socially, you know, the women, typically the women who are collecting the firewood don't have other, you know, aren't liberated to, to sort of spend time doing other things.

**Guy Turner** (13m 27s):

And so there's a real sort of social sort of problem there and when they cook, stoves come in, so you burn the wood twice as efficiently, you use less wood, you spend less time collecting it and, and more time is freed up. Air pollution, health is better. So genuinely unequivocally really good stuff compared to what was there before. The question mark comes in, how many carbon credits are you then gonna claim for that and that's a sort of a scientific calculation of where does the wood come from. Is it coming from a harm, you know, renewable forest or is it just brush wood or are you chopping trees down and not replanting them. So all of those sort of assumptions that go into calculating the benefit of that from a carbon point of view is where a lot of the question marks lie and we have done research saying actually a lot of those cook stove projects are claiming more carbon credits than they should be.

**Guy Turner** (14m 11s):

Now that doesn't mean to say the projects are not good. They are, they're just, when you use the metric of the number of credits that those cook stoves are supposed to be producing and then you use that to offset a corporate emission, that's where the challenge lies, but it doesn't mean to say the underlying project isn't a good one. It is and we need to keep financing those, those mitigation efforts. Now going back to my original, our original research that says that companies buying credits are also taking decarbonization efforts more seriously, that was a really important finding. If we found that companies were genuinely trading off the purchase of the carbon credit with internal mitigation and the credits they were using were proven to be, or shown to be overinflated in terms of their climate benefit, then that would be, I think that would be a much more serious problem. So we do have to get to grips with this quantification issue at the moment, it doesn't seem to be a material problem. It could, so we do need to address it.

**David Greely** (15m 05s):

And from your experience, how do we go about doing the research and collecting and analyzing data that can be trusted by people of different perspectives so we can have a factual basis for these conversations, are there things that, you know, someone who's not spending every day in it like you are, should be looking at better understand what they can trust and what they can't?

**Guy Turner** (15m 26s):

Yeah, so again, sort of taking it down to sort of the fundamental level about how you calculate a carbon credit. The carbon credit is calculated by taking the difference between what you are observing today and it could be a cook stove project or a forest that's grown or protection of a forest and comparing it with some counterfactual. I.e. what would've happened in the absence of that project and you can rely on the measurement data pretty accurately. I mean know, I can tell you exactly how many trees are standing. I can tell you the carbon in the plus or minus instead of an arrow range. I can tell you how many cook stoves are being used. I can tell you if you're growing a forest, I can tell you how quickly the trees are growing and I can measure those things. The uncertainty comes in the argument you're using to create this counterfactual, this baseline of what would've happened in the absence.

**Guy Turner** (16m 13s):

Now if you're growing trees, you've probably got a reasonable baseline. You say, well there weren't trees there before we planted the trees, therefore there are more, there's more carbon being. So I can see that that's quite clear. But when you get into the case of like a protecting forests, you then have to sort of like do some pretty clever modeling to say what was the expected rate of deforestation in that area, and there's lots of other sort of, sort of bells and whistles that go along with those kind of calculations and that's where the uncertainty lies. So in terms of like the reliability of the data, one thing you should be able to rely on is the measurement of how much carbon is in that stock of trees or how many carbon emissions are being sort of emitted from that project. The difficulties when you start to look at the baseline analysis, so there depends on where you look. So the satellite monitoring of forests, for example, is getting better and better and the quantification of the carbon in those trees is getting better and better and that's, that's a pretty accurate and reliable sort of set of data that you can use now.

**David Greely** (17m 09s):

That's an important thing to keep in mind that we're getting very good at measuring things, but of course you can't measure what hasn't happened. You can't measure the counterfactual and that seems to be where a lot of the controversy is in these claims.

**Guy Turner** (17m 21s):

And there is a way around that, which is a very simple way around it, which is what happens in Europe in the European emissions trading scheme. It's what happens in California, what happens in Quebec, in Australia, in South Korea, in New Zealand, et cetera. These are countries and regions that have adopted what's called a cap and trade scheme. So you don't need to measure some counterfactual and the difference between what you're measuring and what, what, what might have happened. You just measure everything, but it's all capped within a bubble within a system and that cap comes down year on year and if the emissions are higher than the cap, you've got to then reduce emissions to keep within the cap and that's where the trading comes in because you can pay somebody else to reduce emissions for you. So that's kind of the sort of the holy grail and the way in which it works in a number of other sort of areas. It's very difficult to apply that regulatory stick to many, many corporates though and the great thing about the global voluntary market is any company can, can volunteer to participate. These are voluntary actions by the way. You know, there is no threat of regulate, there is no regulation saying, you know, Microsoft, you have to offset all of your missions into the atmosphere since 1976. They've decided to do it for the goodwill of the, you know, of their reputation, I think.

**David Greely** (18m 37s):

And it's pretty amazing given that it's voluntary, how many and such a large percentage of the biggest companies have made these commitments and it seems like one of the, the big challenges that the voluntary carbon markets face is that as we've been discussing, we're still a long way off from reaching a working consensus on what constitutes a quality carbon offset or a quality carbon reduction project. The VCMi and the ICVCM have both been working on this for some time now, and I wanted to get your thoughts on what makes this so difficult and are we on the right path or do we need to be trying something different?

**Guy Turner** (19m 15s):

Two very simple questions with very complicated answers. I was actually one of the founders of the VCMi, the voluntary Carbon Market Integrity initiative and that organization was created about two and a half years ago to try and get to grips with this question that you started out with David, which was, is there greenwashing. Are companies in increasing emissions not doing anything on climate and trying to buy their way out of jail by using cheap credit, so the premise of the this integrity initiative is that in order to use a carbon credit, you also have to be walking the torque. You have to be using emissions and you have to be serious about it. Just buying your way out in a con an oil company for example, that's in continuing to pollute the environment, buys carbon credits and, you know, claims victory on the climate.

**Guy Turner** (20m 04s):

You know, it rings hollow and, and I think everyone agrees should be, should be avoided. Another great example was FIFA and the World Cup and Qatar said the whole thing was carbon neutral and you could drive a truck through everything they said the emissions coverage was wrong, the calculations of the carbon credit liability was wrong. The credits they used were wrong, everything was wrong. They never actually did it in the end, actually, they never bought the credit. So it was like a series of failures and I think the world's had enough and a lot of like the UK advertising Standards Authority, a number of other sort of regulators are now stepping in and saying, hold on, you just, you can't claim things that aren't true. It's false information, false advertising and so, you know, they're

trying their best to try and sort of tidy that up, but they need to be careful about not setting the bar too high and saying, well, you can only use carbon credits if you're gonna decarbonize at 5% a year.

**Guy Turner** (20m 50s):

So that would exclude a lot of companies that are trying to decarbonize but not able to do it simply cause of cost reasons from participating in, in using genuine high quality carbon credits. So they have to be very careful about that. And our analysis sort of says that according to the rules that have been proposed so far, you know, less than 5% of companies would currently using carbon credits would meet those standards on the supply side. The Integrity Council on monetary carbon markets is trying to do the same thing in the quality of projects and the credits. And again, their standards that again, really laudable objectives would exclude an, an awful lot of the credits that are on the market. Now that may mean that a lot of the credits on the market shouldn't be there and going forwards, you know, the standards needs to be improved.

**Guy Turner** (21m 35s):

But then that raises an important question, which is, well, what do you do with all the credits that are currently on the market? Should they just be taken outta the market? But they'd be just sort of in an amnesty and said, look, according to our new standard, this is the way the world's gonna work. So this, it's a thorny problem. They're working on it. And the other thing is these are multi-stakeholder groups. So the Integrity Council and the VCMi are comprised of many, many worthy experts and non-governmental organizations and they all have to try and agree on what to do. You know, there's no headmaster or Lord, chief Justice that will opine and suddenly say, right, this is what we're going to do. They all have to kind of collaborate and agree and that process is unfortunately messy, time consuming.

**David Greely** (22m 19s):

And to what extent do you think we may need transparency more than one official standard of quality you know, I think sometimes carbon offsets, you know, it says, oh, it, on the one hand it should be very, very homogeneous. You know, it should be one ton of carbon not emitted or, you know, reduced or removed. On the other hand, there is, as you said, there is not one price for carbon. There is many prices, many different types of projects, many with different characteristics and do we need a way for companies to be able to say, well, I'm using credits of different qualities, but maybe I'm account for them against my own goals in different ways. Maybe if I think the baselines have been too generous, I'm haircutting them and instead of counting it as one, I'm only counting it as 90% of, you know, what it says on the label is, is there room for that in the markets or do you think we need a certain threshold for quality for all credits to meet?

**Guy Turner** (23m 19s):

Well, that's the aim of certainly the IIC, the Integrity Council, and it was the aim of the standard setting bodies like Gold Standard and Vera and American Carbon Registry and the Climate Action Reserve in the US, the big four. That was always their objective and sort of unfortunately what's been found is those standards that they thought they were applying still have holes in them and therefore this next level of scrutiny is being introduced to sort of raise that bar and then there are, there are private ratings that are companies like ourselves who are doing another level of due diligence on those projects and, and, and ranking them across the whole in the market, so we score rank over 4,000 projects across 30 different criteria to give that level of transparency. But isn't, that's not an either or with disclosure as well.

**Guy Turner** (24m 10s):

Transparency and disclosure I think is incredibly important. When the voluntary carbon market was sort of boosted and sort of given us sort of a booster injection by Mark Carney in 2020 the idea was that it would become a commodity that would, it would, the carbon credit would become a vastly traded liquid commodity that companies could buy and sell. Investors could buy and sell and hedge and take positions on and that liquidity would attract more capital and the whole market would flourish and produce a lot of climate benefits. Now that only works when the, the ton of a ton is a ton applies and you can guarantee that and it doesn't matter what project it comes from, if you get a dividend from a company in your, in your stock portfolio, it's a dollar. It doesn't, you know, it, it has the same sort of utility no matter where it comes from.

**Guy Turner** (24m 58s):

And, and that that's the expectation. A barrel of oil doesn't matter what well it came from mostly some are high sulfur, some are low sulfur, but by and large it had, does the same thing and the expectation was that the carbon market would follow that route. It's not turned out like that. So far, the provenance of the credit is, is becoming increasingly important and therefore the transparency of that

project, who did it, how is it being monitored. All of the, all of the information really is, I think needs, it needs to be there alongside the claim on the use of the carbon credit that it's, that it's generating.

**David Greely** (25m 32s):

I think that transparency is incredibly important and I got into commodity markets through the oil markets and the energy markets and I think everyone thinks a, a market they're not familiar with is very simple and a market they are familiar with is very complex. So sometimes when I hear people in the carbon space say that carbon can't be a commodity because a ton isn't, a ton isn't a ton in the oil market I would take exception and say a barrel's not a barrel's not a barrel and you know, what typically has to happen is the, the consumer, the refiner who's gonna run it through the refinery needs to make sure it's fit for their purpose and they'll pay less for a barrel that's not, or even not buy it if it's, if it's not appropriate and I think we need that level of scrutiny on the part of buyers and transparency I think is what enables that level of scrutiny. So it's, I'm glad that you're providing more tools for people to help them do that.

**Guy Turner** (26m 22s):

There is, there are companies that are offsetting two or three or four times, I think the maximum of purchase three times the number of credits that they that they calculate they need just to sort of provide a safety net and are doing sort of effectively doing that rating themselves.

**David Greely** (26m 38s):

It's like building a medieval cathedral just over engineer.

**Guy Turner** (26m 44s):

Yeah, yeah.

**David Greely** (26m 45s):

I wanted to take you back, you know, we started talking about the forest projects that were at the heart of the Guardian articles. They've been a large part of the supply of carbon offsets in the market and so I wanted to ask you, how do we move forward with these projects. What do you see as their value and role in what issues still need to be sorted out?

**Guy Turner** (27m 04s):

They're very high profile, but they've only contributed around the 20%, like a fifth of the credits over the last year or two. You know, renewable energy credits, industrial gases, cook stoves, energy efficiency projects, there's a whole range of other project types. They, they get a lot of media attention and I don't, want to overplay their status. They, and the reason, you know, for good reason I suppose because forests are important and you know, we're, we're deforesting at an alarming rate still globally and those destructions in habitats are part of the, very much part of the problem rather as well as the carbon emissions that are being released when they when the trees are filled. I mean, what needs to be done coming back down to this baselining issue the quantification of the carbon in the trees is getting better and better and there's less error in that side of it.

**Guy Turner** (27m 50s):

The way to solve, one of the biggest challenges with protecting forests and trying to quantify the benefit is what's called leakage and that's a technical term, which means that if I protect an area of forest, I can claim the carbon credit because I would've chopped that down while I'm making the claim that I might have chopped those trees down and I've protected that area but what happens if I chop the, the forest next door down? So over a larger area, the net rate of deforestation hasn't changed. I've just cherry-picked the areas that I've left standing and claimed that, you know, I've, I've protected those and that's called leakage and you see it in a number of different areas. And the best way to protect against that is to just increase the size of the area that you're including in your calculation, potentially up to the national level.

**Guy Turner** (28m 32s):

So countries, governments start to become a lot more involved in this because they control the AI, the concessions and, and, and the land, the land use for the entire area and then they can start to calculate, you know, the overall rate of deforestation that would be expected in that. And then you can roll those sort of national level deforestation baselines into the project level kind of calculations and then you can add them back up again at the end of the day and check that that leakage isn't, isn't occurring or is being monitored and, and compensated for in some way. So that's the main sort of tool that that, that they're working on.

**David Greely** (29m 07s):

Yeah, and that brings me, I wanted to talk with you a little bit about the role of government in the voluntary carbon markets because you know, just now on the red projects, you know, looking at the prevention of deforestation at a more jurisdictional level, at a government level is a potential way forward. Looking at cap and trade as you talked about earlier, is another way to be able to get around some of the baselining issues that are troublesome and so I'm curious, looking more broadly at the voluntary carbon markets what do you see as the path forward from here. Do you see their future as one in which the voluntary carbon markets gets subsumed and absorbed into the article six markets that are tied to governments and to the governments NDCs or is there another role in another place for the voluntary carbon markets?

**Guy Turner** (30m 00s):

I don't think it's an either or question. I think it's an and question. So there are going to be uses for carbon credits where the government endorsement and you refer to the article six sort of process, which is the, to country accounting of emissions is important and apologies for the listeners because this is what gets a bit technical, but under the Paris agreement, every country in the world has set an emission reduction target and it's self-imposed. It's not top down by the UN. Every country has volunteered to take action. They vary hugely by country. Richer countries are asked to do more than the, than the developing countries, and therefore they've got an obligation to try and reduce emissions. So there is this criticism of the voluntary carbon market that if a company invests in a project in a country and then claims the carbon credits from that project is occurring in a country and the emission reductions are gonna also gonna be accounted for in that country's emissions calculations.

**Guy Turner** (30m 58s):

So are we not double counting here. The country gets the credit and also a company gets the credit and the argument against that is that well actually the yes you are, but it's not a problem because the company that is buying the carbon credit from that project, its emissions are never accounted for in the same system that the countries are. So actually it's a double claim, but it's not a problem. It doesn't matter. And actually what it does do is bring more finance into the projects than in the countries and more gets done. There are also applications though, where the government, you want to, you definitely want to avoid that double, double counting or double claiming. And that would be for example, where you've got a compliance system where, like in Europe, the emissions from all of the companies in the cap and trade scheme are being added up and calculated as part of the national totals.

**Guy Turner** (31m 45s):

Another example is the international aviation sector under the what's called core the carbon offset and reductions scheme for international aviation under the UN, where if they're gonna be making use of carbon credits, they have to hold their emissions constant at sort of 2019 levels and any growth above that needs to be offset. Now they need to make sure that any credits they're using are not double counted with a country's claims on their, in terms of their, their Paris targets. So the way to deal with that is if a carbon credit is sold from a country to say an intern international airline, the country has to make an adjustment in their national accounts and that's a very important, you know, that, you know, that retains the integrity of the accounting system. The difficulty is that the government then has to authorize that sale of that or the export of that credit in order to make an adjustment in its submissions account. And we don't know that that system has net not yet been fully sort of road tested, but that is one way of retaining the integrity of a carbon credit system and so you don't, that would sort of avoid any risk of inflation or, or, or over crediting and it, it, it filtering through into sort of higher emissions, but as I said, it's not a problem at the moment because the company emissions are not, are not being accounted for in the same system as the countries.

**David Greely** (33m 02s):

And I wanted to ask you, is the problem right now with the labels, companies are applying to things, you know, to some extent a lot of the criticism is around carbon neutral claims, but I don't think people would dispute that the actions being taken are beneficial. So is it that companies need to change the language with which they're talking about their efforts at climate action?

**Guy Turner** (33m 29s):

That certainly seems to be the epicenter of the sort of legal issues that are bubbling up at the moment. The challenges to Delta Airlines the class action against Delta Airlines saying it was carbon neutral and there's been cases in the UK and in Europe as well, and it is these words carbon neutral which have a very sort of definitive interpretation and are relatively easy to disprove. Actually if you can't have a hundred percent confidence in the credit, you can measure pretty easily the emissions that that company is being is, is creating and therefore for the carbon neutral claim to be true, you have to prove with a 100% confidence that the carbon offsets reduced exactly



that amount of carbon and if you can't, then that claim is not true. So sort of technically those two words are very laden and I think what you'll see is companies using alternative terminology to get the benefits of the same, you know, the same action and so that their customers and their investors can still see they're doing good things for the climate. You know, they might say we're being climate used sort of, you know, less specific terminology, you know, we're, you know, we we're climate positive or we are climate friendly or now then the regulators will probably come in and go, well what exactly do you mean by this? You know, you can't just be purposely vague. But I, so I think that, you know, there is a lot associated with the actual words that are used.

**David Greely** (34m 58s):

Yeah, the words matter and speaking of words, I wanted to first thank you for being gen, very generous with your time and your experience and your research with us and our listeners today. Also, you know, this is our summer playlist series on Smarter Markets and much like we did last summer, we, you know, think of this as beach reading in a podcast, something to listen to while everyone's relaxing halfway through the year and thinking about some of the big issues for the back half of the year, but in that spirit, I wanted to ask you, you know, the words that matter for you this summer, what's on your beach reading list this summer. Would you be able to share that with our audience?

**Guy Turner** (35m 34s):

Well, firstly, my thank you for the question. It's a lovely question to answer. I mean, firstly, I'm, I should read more. When I founded Trove three years ago, I kind of knew what I was getting into, but I didn't realize just how preoccupying it would be. So my reading list, unfortunately is a lot slimmer than it should be and that's something I definitely want to change maybe this summer, but the book at my that is by my bedside at the moment is one called How Westminster Works and Why It Doesn't by Ian Dunt and I thought I knew how the political system in the UK works, and I do to some degree, but this really sort of exposes the gory details in the traditions and inefficiencies in our political system and how random it is, and also how effectual it is for effective sort of policymaking. So it's very educational and yeah, that's what, that's my poolside reading.

**David Greely** (36m 32s):

Well, thanks so much for sharing that with us. I hope you get some time by the pool. I know you're very busy and thanks so much. It's great talking with you.

**Guy Turner** (36m 40s):

Great talking to you David.

**David Greely** (36m 45s):

Thanks again to Guy Turner, Founder and CEO of Trove Research. We hope you enjoyed the episode. Join us next week as we continue our summer playlist 2023 with our next special guest. We hope you'll join us.

**Announcer** (36m 59s):

This episode has been brought to you in part by Base Carbon. The trading of carbon credits can help companies and the world meet ambitious goals for reducing greenhouse gas emissions. But how do we judge the quality of these projects and how can we ensure that our investments are creating real value? At Base Carbon, we are focused on financing and facilitating the transition to NetZero through trusted and transparent partners. It's time to focus on what's important. It's time to get serious on carbon, learn more at [basecarbon.com](https://basecarbon.com).

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