

Blue-Sky Thinking: Is sustainable aviation fuel the key to decarbonizing business travel?

Rich Thompson 0:04

Good morning. Good afternoon and good evening. Wherever you are in the world, welcome to Business Travel on the fly. I'm Rich Thompson, Global Head of ESG at CWT. I'm joined today by two guests, Dan Kreibich, who is the Chief Product Officer and founder of squeak, a climate tech company from Berlin, it's helping troubled companies to achieve their climate targets. Before that, he founded Compensate for Lufthansa group, back in 2019, which was the first platform to bring sustainable aviation fuel or SAF, and you'll hear that a lot throughout this podcast, to passengers, which makes him an absolute expert on SAF and we're excited to hear more about this on the podcast. Susanne Bouma is with me as well. She's head of partnerships and programs for aviation at Neste, responsible for accelerating aviation emissions reductions through innovative partnerships to increase staff uptake. Before joining the company in 2021, she worked on a variety of complex sustainability topics for the Rainforest Alliance PwC, and the World Bank. So two really great guests to talk about this really interesting topic of SAF. SAF is something that travel managers are hearing a lot about. And being a Travel Manager these days is a tricky business. It's not an easy role to be in, you've got to manage the travel programs, but at the same time, and increasingly really have to have a hat for sustainability on your head to try to navigate the waters. So let me set the scene a little bit for for everyone around SAF. It's still in its infancy back in I think it was 2021, was the first commercial aircraft passenger flight from the landed in Washington DC that used 100% Sustainable aviation fuel on one of its engines. And since then we've seen an increasing uptake of SAF but it's still in its infancy. So let's fast forward to August 2022, when we did a podcast where we spoke with Lufthansa about the critical role that SAF will play in decarbonizing air travel. And the extremely limited availability of SAF was identified as a key challenge. Let's move up to today. 18 months later, has the supply chain situation improved. And that's why we're here with our two guests. So let me kick off this and get into the first question, which I'll throw to Dan, which is about corporate travel programs and mitigation. So the most common way that corporate travel programs want to mitigate their carbon emissions today is through a thing called book and claim. Can you explain what this is and how it works?

Dan Kreibich 2:44

Yeah, sure. And first of all, great being here, book and claim is the topic of the industry. So very simply put what book and claim system is, it is a way for companies to use SAF why they actually not have physical access to it. Very good comparison would be, for example, a renewable electricity contract. So you buy renewable electricity, but if it's coming out of the plug at your home, is rather unsure, right. But what you can be sure about is that the producer has injected that in the appropriate amount into the energy grid. And this is basically how it behaves with SAF as well. So a company buys a flight, also buys the respective amount of SAF in the form of credits, and can then claim the environmental benefits of that, although, and that has to be mentioned, the fuel was potentially fueled into another aircraft.

Rich 3:42

That's really interesting. So this book and claim kind of decouples this problem, you can have the production and then you could have the consumption of it on the other side. Susanne, do you want to add anything to that on booking claim, from your point of view? Witnessed it?

Susanne Bouma 3:58

Yeah, first of all, so thanks for having me. I mean, it is indeed the topic to unpack a little bit. So really happy to do that with you. And with Dan today. First of all, or maybe 2021 was a big marker in the history of SAF. And we will view that of course, with with great admiration. However, at Neste, we have been producing SAF at commercial scale since 2011. So our history goes back a little bit of further and I mean, of course, this topic is very dear to our hearts. On the topic of book and claim, I think, as Dan has described, I mean, this is the lever for organizations to decarbonize while they might not actually be sitting physically on the plane that contain SAF or even own anything to put the SAF in. So here of course, the problem of the travel manager that we might be zooming into later, is of course, they don't have the oversight on which engines contain SAF where and when and as book and claim is still evolving. And it's also described in many different ways. shades of green or gray, whatever you like. Credibility is super essential for companies for many reasons, of course in the system, think about the risk of you know, who has claimed the same amount of SAF twice, thinking about what that means to stakeholders and reputational risks. So ensuring credibility in the system is absolutely critical for us all to continue to put our trust and hope in SAF as one of the big levers for decarbonisation. What it also enables is, of course, to allow anyone to chip into the decarbonisation of aviation, I mean, not everyone indeed has the engines to put the SAF in physically. So that provides a huge avenue for others to come to the table.

Rich 5:44

Okay, that's really interesting. Let me stay with you Susanne. When I hear booking claim, it sounds a little bit like carbon offsetting, which, you know, has been attacked with quite a bit of skepticism over the recent years. Can you or either you or Dan, explain to me how book and claim is different than carbon offsetting? Because back to your point about credibility, I would be ashamed for book and claim to be kind of put in the same bucket as carbon offsetting.

Susanne 6:13

Yeah. And then thanks for raising that very, very topical question. I think that's all been on all our minds. So of course, how can we safeguard the SAF industry that is in its early stages against potential damages around reputation and trust and unpacking book and claim in terms of how it works, I think we need to look at that there is certainty that fuel was actually used. And of course, that has to be verified and validated. And just like, of course, you would want to validate that a tree was ultimately planted for what you paid for as a company. I think the big difference with SAF is that it decarbonizes in the value chain. So here we're talking about aviation, and SAF is a lever to decarbonize aviation within the aviation ecosystem. Whereas offsets, we might see a project far across the world that either invest in someone's cookstoves or in planting trees or other projects that are outside the value chain. Another big difference is that, of course, when we buy offsets, we are not tackling the essential problem of decarbonisation itself, say Company X continues to emit year on year, and they buy offsets. With SAF, they can actually reduce their overall emissions. And that's a very, very big difference. And I think we need to emphasize that here. So we're not compensating, we're not paying off our guilt, so to say with offsets. But we're actually tackling the reduction in the source of aviation. That said, offsets still have a role to play, obviously, and will remain to have a role, of course, where they are credible, to continue to support the overall climate goals.

Rich 8:04

Okay, that's great. You mentioned something earlier. And Dan, I'm gonna throw this to you about this idea of a double claiming, but let me frame this up for our listeners, countries around the world are introducing SAF or SAF mandates. For example, starting in 2025, I think the European Union will require airlines to use at least two percents SAF on flights, leaving EU airports, and this will be progressively increased to 70% by 2050. I think that's the latest mandate. Similarly, flights leaving from Singapore will need to use at least 1% by 2026. With all these mandates coming out, and this the supply chain, there's a pressure on the supply chain, isn't there a risk of double counting or double claiming SAF usage? So basically, corporates are paying a premium to purchase SAF that would have been used anyway. So can we talk about this double counting and maybe the price premium a little bit? I will start with Dan on this one.

Dan 2 9:07

Sure. And and I would say, that's really interesting and also complex topic in the end, right. So I tried to simplify that a little bit. But as we see, also, as with many topics on a global scale, it's sometimes difficult to find common ground, right. And with all of these mandates in different countries, acting sometimes on this on behalf of their selves. There is some complexity in the market, and it's gonna, you know, shape and shape itself more and more. I think when you really speak about double counting, I see good rules that are in place that shall prevent that risk. And the idea in the end is that everything that is additional can be also claimed as an additional contribution. So what that means is, if there's already SAF in place or sustainable fuels also in other verticals in the mix of the regular fuel, then the additionality, so everything what was bought on top shall only pound for what was actually done on top. We have built those book and claim systems where that actually works. So for example, in the Netherlands, where you have already some bigger mandates in place, and where there is already sustainable fuel part of the regular fuels that you would also for example pump at the gas station. And we have done those things where companies can buy those additional amounts can also accredit themselves with those amounts without any double counting of the mandated amounts. I hope that was kind of pretty clear. But as I said, there is a lot of shaping in the market going on. I feel that could happen something in this worldwide market. Right. But I think also at the same time, there are those companies that apply the rules such as we are, such as Neste does. And therefore I think that this risk is basically not there. Susanna, do you want to add something on that from a fuel producer perspective?

Susanne 11:16

Yeah, definitely, if you allow me also conscious of other topics we want to cover. Or of course, we celebrate that more and more corporates are setting ambitious targets and date and deserve to, to live up to those targets in the most credible way, in the end, that their Euro that is spent on reducing emissions with SAF is spent in a credible way in which they can then justify to their board and their shareholders and the public, their customers and so on. Double claiming is a risk there. But there are very good developments ongoing and we've been part of development together with ICC, who's known as one of the main certifiers of renewable fuels to extend the credibility cover from this credit creation covering the transaction to ensure that there's an independent party that actually looks over the shoulder to ensure that that amount of SAF that was paid for by Company X can actually be reduced to, to attribute to those targets of that company.

Rich 12:24

So this really explains the importance of these official registries, and this independent verification of the carbon accounting to really make sure that this is, the mitigation that's actually happening, that that fuel is being used, and not being counted twice. So that's, I think that's a really important point to make is this will this will increase confidence in SAF as a mechanism to transition to a lower carbon economy is that would you think that? Would you consider that to be a fair kind of read on that?

Susanne 12:58

Yeah, definitely. So I think I emphasize a few times that the industry is still growing and scaling and having sufficient trust from from the broader public, from its customers from stakeholders is essential. Of course, we don't want to be cut down in the infancy when there's so much potential in terms of decarbonizing the sector.

Rich 13:20

Okay, that's great. So let's, let's pivot now to a topic that's dear to the heart of a lot of travel managers, which is cost. What kind of premium can a corporate expect to pay to purchase SAF today? Is the price difference between SAF and conventional jet fuel? How is that different scene moving? Are they coming together? Price wise? Is there still kind of a big premium on staff? We can we can unpick the cost element today? A little bit? I don't know. Dan, do you want to kick that off?

Dan 13:53

I think that would actually be a question to Susanna as a field producer, I think what's a tendency in the market that we see is that there is of course, the aim to decrease the price of those production volumes. And that's of course, as a company, bringing SAF to corporates, also in our very interest. But maybe yeah, Susanna, I think that's more on your side.

Susanne 14:22

Yeah, and thanks for still hoping for that crystal ball. That's sorry, today again, I didn't pack cost. And price is obviously one that we discuss quite often with everyone around the table. At the moment, give or take SAF is approximately two to three times more expensive than the fossil fuel that we rely on. And we need a lot of it about three to \$400 million to just keep all aircraft in the air for a year. But that's maybe an unfair comparison, as of course we have not factored into cost, the cost of carbon and also the cost of climate, that's not factored into then comparing fuel to fuel. I think that's one thing to bear in mind, then the next level that I think we need to touch on is that, of course, seeing a ticket or a flight, not all of that cost that you see is fuel costs. So we've run some models, we've done some different routes here. And there, I mean, it's a, it's a back of the envelope calculation. But of course, your flight doesn't become two to three times more expensive just because there's a different fuel or partially, there's a different fuel that's being used in the aircraft that the ticket is associated with. So one could look at that there will be maybe 20%, or 30% increase, of course, depending on the amount of SAF that's used. I mean, given that we're still scaling, and 100% test flight is fantastic. I would not encourage now everyone to start flying on 100% SAF. So we can in small steps, manage both a slower price absorption of SAF as a better alternative to fossil fuel. And therefore this two to three times more expensive is when you compare one tonne of fossil fuel to one tonne of SAF, but it's not the actual cost that is that the travel manager will face or the average consumer will face. So the real question to ask here is, what will it cost if we don't use SAF and not just today, but also in I guess a much longer time horizon when we do need to think about the cost of carbon overall?

Rich 16:35

Well, let's let's pick up on that word time horizon. So if we look ahead, what are the future prospects for SAF in the business travel sector? Are there any other emerging technologies or trends also that could accelerate its adoption? So what's driving SAF? And what does its future look like? Dan, maybe or either one of you.

Dan 17:00

Happy to pick it up. So we see actually major trends, especially going on in the corporate travel segment. Connected to SAF, which is firstly, we see corporates are moving at this moment in time, quite a lot faster due to regulations and commitments. So I'm thinking here about CSRD or sbti commitments, which ultimately bring some sort of proactiveness into this, this field. And secondly, a big trend that we see is the easier it is made for corporates to engage, the better, right and really here also, as we are doing in this triangle, right between the CWT, Neste and Squake, the SAF corporate program is really good mean to that. But I would like to dive a little bit deeper into both of these trends to you know, elaborate a little bit more. And firstly, right, we were speaking about the regulations and commitments. And for everyone who isn't aware, I believe most corporates would be aware that were CSRD strikes, CSRD requires around 50,000, large companies kind of operating in the European Union, to publish their environmental impact. And the entire idea of CSRD is basically that it's made for investors and consumers. So they can make decisions based on exactly those insights. Right. So as we see those, those data sets of the data in general is published, we see also companies improving, on you know, their environmental performance. And as you speak about trends, that's something which is kind of undeniable and really, really well visible. That was on this first part, the second part was about making it easier to use. And, again, I think what's happening at CWT with the SAF corporate program is that we can see companies signing up for those things. And there are different reasonings or reasons for companies to go that way. Maybe their balance sheet, right that they publish a cleaner, a cleaner balance, or for some it's even the public story, but still, it's a good story. So I think there are good reasons to invest. Further, and this is a little bit more down the line, what we see is that companies look for certain information in their booking flows, right? So across the TMCs, but also OBT's and so on, they want to see co2 costs and so on and kind of implement that in some sort of policies so that a carbon cost is attached to a trip. And I think that is ultimately also a good way to nudge kind of their own travel and then incorporate costs as well. Coming back to this entire theme of you know, the easier it is, the more likely it's also that corporates really contribute. And maybe to finish it off. Speaking of trends, we also see some interesting insights or have some interesting findings in the market. So we see some companies are particularly active in the market, you know, buying SAF direct air capture, and all of those things. And those are specifically for, for verticals, which is technology companies, you know, that have usually very early on made their, they set their goals, shipping their things around the world and trying to make that in you know, carbon neutral way. Farmer, we see very active luxury fashion. And last but not least, also automotive. So, that's pretty interesting, as you ask right? Big trends happening, and pretty excited to see where all of this is going.

Rich 21:03

Susanne, from a producer's point of view, are these the same trends that you're seeing or anything else that you would want to add to Dan's list of crystal ball about where this is headed?

Susanne 21:13

Yeah, thanks. I agree with that, with all the observations that Dan has shared, we're seeing most of the same things. What I would add is maybe from just a fuel and technology perspective, that of course, the power to liquids or E fuels are still on the horizon, too. But we're really talking about a longer timeframe before these will start to kick in. And then of course, I mean, the overall travel growth trend, not to be forgotten. I mean, we've lifted a few positive enablers. But of course, business travel, is looking in the mirror. I mean, do we need to travel for every trip? Do we need to shift modes here and there, but the bottom line is globally, travel is of course expected to grow dramatically, and with it, the consumption of fuel as today's aircraft are still manufactured with traditional engines, which will consume one fuel or another. So I think these are just my additions on that front.

Rich 22:16

Okay, that's really interesting. And, Dan, you mentioned earlier, you talked about direct air capture, I believe Sqaake offers access to other carbon removal offerings, such as direct air capture, or biochar is in? So are you seeing that corporates are kind of building an overall strategy using these different solutions to reduce their carbon is that what you're getting at when you're talking about the verticals like automotive or luxury? Is that they're looking at kind of a mix of these different technologies or solutions in order to help them reduce their carbon footprint overall?

Dan 22:55

Yeah, and I mean, that's another really big question, in my opinion, where I think it would be good to start a little bit earlier. So when we speak about the sustainability strategies of companies, right, like travel managers are one part of that entire strategy, right. And what we see is that corporate travel managers have still a relatively hard life organizing their sustainability strategy in travel. So what does that mean, they have, you know, have to have access to different data sources, they have to understand their overall co2 emissions, and then they have to decide and that's really touching the part that you're mentioning, then they have to decide how to mitigate those emissions, right, speaking of the different projects, but also a different price tags. And then in the end, it has to, again, be implemented in you know, the different touch points and be rolled out. So we see that, we solve that also with our platform, and really speaking about the different projects. Again, multiple things come into the equation. So what they can apply on their balance sheets would be one, maybe there are different preferences from company to company like do they more belief in, you know, natural renaturation projects online and technology based ones. And then of course, I think that's something you should not be quiet about. There are different projects that come with different price tags. So comparing a few of those things, for example, biochar which is gaining popularity, SAF and direct air capture, we also speak about a price increase, kind of in the same order, right. So, I think that some of the considerations they would pick up, I feel really, in terms of relevance for the travel industry. SAF has the most direct impact, as Sussana also earlier said, right? It's directly connected to your activities, namely a flight and you reduce immediately the emissions, we feel this is this is the thing to follow. But if companies have, you know, policies or tend to either towards other directions like direct air capture and so on, we would never book them and very happy to help with this as well.

Rich 25:19

Okay, that makes a ton of sense. This has been fascinating. I didn't realize that SAF had moved along, as far as it had. And it's gaining the traction that it is. To wrap things up, to the the affordability to sort of you've any parting thoughts you'd have made specifically around what kind

of additional value do you think SAF brings to business travel? What is, if there's one thing we'd like everyone to take away from this podcast? What would it be for you each?

Susanne 25:53

I can go first. Thank you, I would go back to one of the points I made earlier, and it's that we all need to chip in. And there's a cost to decarbonize and to ensure that we're on the climate journey together and we make progress towards the 2030 or 2050 goals. So there is a role to play. And SAF is a great lever in doing so. It is the most immediate, most available source to tackle your decarbonisation of aviation at the root. And I would encourage everyone who was listening to take a look and to ensure that if you are making those steps towards setting targets internally to decarbonize your air travel, that you do that in the most credible way as it will support the overall decarbonisation targets that we need to achieve as a sector.

Dan 26:53

Yeah, absolutely. Absolutely. And my few cents on that are, is that, you know, sustainability, I don't see it as being purely altruistic, as well, as you know, most companies are not altruistic. So it's good, if there are some additional perks when going for those investments as well. Right. And we see that it's different from company to company. So I think it could be simple things. And maybe it's not even that simple. But you know, brand image and reputation. What we've seen is that, and I mean, it's its evidence statistically, that sustainability performance and company performance go hand in hand, right? So thinking about, you know, the Tesla's and Patagonia's of that world of this world, that really play that game pretty well. I think there are some companies that have some some, you know, compliance, or goals, scheme set up, where, you know, they simply achieve their goals. And what I would also not mention, actually, as the last part, as, for example, things like, you know, market differentiation, employee engagement, those slightly intangible things, but thinking here, as well, you know, about consulting businesses and so on, where they produce most of their emissions when when flying actually from a to b, then you know, it's a good sign towards the employees that will be asked at home, if things you know, that necessary to travel from A to B, that this is a way how companies can engage with their employees, but also, as I said, in the market, right, so thinking, for example, here about the tech companies that ship their goods from A to B and so on. They want to have carbon neutral supply chains, and so on. And SAF is really something that helps their storyline. So I think there is a big potential for companies, and it's just about finding that angle, and I'm happy to help all those travel managers that need to find that angle.

Rich 29:00

Well, thank you. Thank you both for your time today, Dan and Susanne and this has been a fascinating discussion. If you're keen to find out more about the future of travel and work from experts around the world, subscribe to business travel on the fly on Spotify, Apple Google Play or wherever you get your podcasts and thank you for listening today.