



**Net Zero Healthcare (Boston Scientific)**  
Presented by Michelle Sullivan  
at the 10x Medical Device Conference – London, 2022

**Michelle Sullivan:** Here are the ways that they are moving towards Net Zero, with their own direct and indirect emissions, which are not the bulk of emissions, these are the things that you're in control of in your company. And then there's the indirect emissions. And that's all of us. And anyone who makes medical devices, anyone who makes medicines, anyone who serves the NHS or its food or building things, all of their emissions, and then there is that pesky travel group there for us to think about.

So, here's where they're going to get their emission savings from in the plan that's going to be in 56 countries near you soon. And here is the bit that's us as – medical devices, it's a big part of the expectation.

**Note:** The following was auto-transcribed by [otter.ai](#) and got probably 80+ percent correct without edits. Interpret accordingly.

So morning, everyone, my name is Michelle Sullivan. I work as a head of Public Affairs for Boston Scientific. But I'm here this morning because accidentally, I've become an expert on environmental sustainability. And the

move to Net Zero. Joseph Septic, allegedly. But he's Americans. But a year and a half ago, if you decide I'll be still on stage, but I do this quite a bit now talking to people about environmental sustainability, how medical devices are going to become Net Zero, how are we going to reduce our carbon footprint what this all means, I would not have believed you. I didn't know anything about it. Other than my son was really into it. And then each one's and supply chain and supply chain came to us and said what's often scientific thing about environmental sustainability, I said "I have no clue," then you find out, I went away.

And I just got a whole team of engineers and people that were working on scope, one, two and three emissions and I joined a few calls are excited to pick up some information. And in the end, I was the only commercial person that was there. And I said I need to understand this terminology because I don't know what you're talking about. So, I did a small eight-week course with Cambridge University is called state of art. They have a whole sort of department, which is an institute of sustainability leadership. And people go there from all walks of life, all different companies to learn for eight weeks how to be a leader in sustainability. It takes 10 hours a week, allegedly a bit more than that. But at the end of it, I know miners, I know people from oil and gas industry. I know people from Abel and Cole, I met people from Aberdeen Council, the loads of finance people, loads of banks, the banks are all over this. And it became obvious this is not going anywhere. And this is only gonna get bigger and how they describe it is.

It's the next industrial revolution. And we're about to, we're about to feel what that means. We're about to see how that changes our society and how we go about business. And so today, I'm just gonna talk you through a little bit about why we care about this. And then try to stimulate our thoughts as to how we can make this happen in a world of medical devices where we care about people's health, where things made plastic and precious metals, where things are disposable, where we don't know how to stop this. So, I'm gonna try and get us in the right way and make it possible in your brains. So don't get this thing.

**Joe Hage:** Impressive start, ladies and gentlemen, don't you think?

**Michelle Sullivan:** Thanks. So right, I start with this picture. And I chose this picture, because you can see a little sort of blue fires around it. And that is our atmosphere. And if you set off from the surface of the planet in your car, as if

you're driving on a normal 60 mile an hour road, you would set off from the surface of the planet in your car, and you would break out of the Earth's atmosphere in five minutes. That's how smaller is. What Al Gore says is, we're using this as an open sewer. And it's got a finite space and a finite thing, and it protects us. Now, this is interesting. No one knows who said this, but it's brilliant. Anyone who thinks you can have infinite growth in a finite environment is either a madman or an economist. The minute you start to think about that, it's like bonkers, right? We've got this finite thing, but our whole society is built on growth, growth, growth. So, what do you think these two things have in common? We have an oil rig. And we have some tomatoes. Got any idea? Greenhouses very good. So...

**Joe Hage:** They both require energy.

**Michelle Sullivan:** They do exactly that, now, I read this brilliant book, it's called how the world really works, I'd super recommend it, because it helps us to think about this in a sensible way. We are all addicted to fossil fuels. And if you were sitting in Stockholm, in April, and you had on your plate, a tomato for your lunch, it was a medium sized tomato. And it had come from southern Spain, because it likely would do at that time of year, that Easter, that tomato would have taken between six and eight tablespoons of oil to get to your plate. That's how addicted we are...

**Joe Hage:** Human equivalent producing that.

**Michelle Sullivan:** Literally, you would have used that in energy to get that to you to grow it, to transport it to further transport it, right. So, you know, this isn't something where we can go and let's not use fossil fuels, you know, you're wearing stuff that's built on fossil fuels, half the world's food couldn't exist, if we didn't use fertilizers. You know, we're totally addicted to this. So, we're going to have to think what we're doing. Now, the other thing that happens is sometimes people say, I don't believe this has got anything to do with it. Somebody said to me the other day, someone I really respect someone I've worked with for years. The IPCC report, which I'll come on to in a minute, says, the temperature hasn't gone up in 30 years. And I'm like, okay, all right, this isn't actually true. You're cherry-picking things that aren't true. But the IPCC, these are all scientists that volunteer constantly to update the world, about what's going on. And 1200 observe them all agree that this is what's going on. And its sort of getting impossible to refute it now. But we still managed to.

So here on the left, these are carbon dioxide emissions from fossil fuels. And you can see how fast our society which is built on the energy of fossil fuels, has sucked them up and use them and emitted into the atmosphere. That's five kilometers high carbon dioxide, and carbon dioxide and other greenhouse gases. Things like methane, nitrous oxide used in health services got some interesting stories about that. They create a problem, that means that our earth can't get rid of the heat and quickly. So as the carbon dioxide levels go up, the temperature goes up. There's an observatory in Hawaii called Mount Allah and they have been measuring the carbon dioxide every year, all the time since 1960. And so, you'll see that, and you'll see the temperature.

And on my LinkedIn, I spoke to someone earlier, Tim, about why on my LinkedIn, it says, "How many parts per million CO<sub>2</sub> when I was born," which was 319. And now it's 100 more, it's 25% more in the atmosphere than when I was born. So, you know, this is the beast we have to tame. So other things people say is, well, half a degree, one and a half degrees. This doesn't sound very much, right. That's just like a better day in the garden, isn't it? But these are average global temperatures. We are, you know, we've had a Paddington Bear theme this morning. We are the Goldilocks of all of nature, we have a teeny tiny variability that we that we can survive in and grow our food and have clean water and be able to survive. And this little rise in temperature, which by the way, you know, we're working to Paris, you know, one and a half degrees rise. I think we've blown it already. Guys, I don't think most of the scientists agree. Now we won't be we will go beyond one and a half degrees, we're at 1.1 1.2. Now greater rise, and you can see the effects that are starting to happen. But these things make a difference. You know, we're not going to have an Arctic. Once a decade, it does, there will be no sea ice, whereas it used to be once a century is like a freak event.

Half as many people will experience water shortage. If we'd have just kept one and a half, there'll be twice as many with water shortage. Permafrost will start really paying releasing more CO<sub>2</sub>. And there's lots of these tipping points that they all talk about. And we don't know what they're going to mean. We don't know what they're going to mean. But they mean there's going to be big releases of CO<sub>2</sub> into the atmosphere, there's going to be lots more flooding from sea level rising. And we've seen this summer lots of examples of this, all of us have had an experience that shows us that something's different, whether it's our two days in Surrey with 42 degrees where we couldn't leave

the house. And I had someone come around that later that week talking about pensions. And I said to him, "so what was that like for you?" And he said, "Oh, it was hot." Wasn't it was like, yes. I said, "what did you do?" And he said, "Oh, it didn't change much." Really? I said, "really?" I said, "how interesting, what did you do those two days?" He said, "I just sat in the house." I said, "did you shut the curtains?" "Yes." They do normally sit in the house where the curtains shut them. He said, "nothing much changed?" Well, no. I said, "how do you do your business?" Because you're sat in my living room right now. Anyway, "Oh, yeah. Go out the house and travel around? Would you have done it that day? No. Well, so if that was a month, what would happen that month? And he was like, Oh, I hadn't really thought about that." So, this is what is sort of the reason why we need to get our act together. How is it going to affect me? Why do I care? That there are, it wasn't a third of the land in Pakistan, it was actually about a sixth of the land was underwater. 30 million people were homeless, still. But these things will affect us.

We've just experienced what happens when Russia invaded Ukraine, and how the massive ricochet effect of that, so something happening in other parts of the world in a global economy affects everybody. And all of us will need to get real about that, whether it's with wildfires, where we saw people in London lost their homes this summer, because they had a compost heat in their back garden, or drought. Where actually, again, I experienced that I had to fill up my birdbath three times a day, right? Because there were constant creatures, little insects sitting around it the whole day, because otherwise they were going to die. You know, and the birds were, you know, wasting it by washing it. But drought will change how we can grow food, where we can grow food, what type of food we can grow, the coffee beans, that you will drink coffee from Arabica, they're going to have to change that because they're not drought resistant, they're already changing it. Because it doesn't grow in this stuff.

So, all of these things will have economic impacts on all of us. And we work in health care. And health care, and health is inextricably linked to climate change, which I think is why things like the NHS really do pay attention and want to do this. So, these factors that you can see here are all affected by climate change and will become worse through it. I always place don't look up on my LinkedIn post, because after I watched that film, which I thought was about COVID, I've decided it was actually about climate change. And some of the big scientists of the world like Peter Camus, they constantly refer to it, and they quote from it, and they quote, the last line of the film, which is why we tried, we by God we tried, right, as the meteorite hits the planet. And this guy

600 years ago, gently this is by the way, anybody know, I mean, it's bit incognito, as in Machiavelli. So, 600 years ago, he says, you know, the incredulity of mankind, who will never admit the merit of anything new, until they've seen it proved by the event. This is why we're in this tricky time right now, because we don't really want to believe it. I mean, everything is going to be that bad. And maybe someone else will solve the problem. And maybe it'll go away. But it's not going away. And your children, and my children and their children will have to deal with this big, big time. So, here's what the IPCC, the scientists that all agree on everything who knows, never normally agree on anything. They have said, we've literally got three years, you know, that big graph where it was all rising up, we've got three years to stop that rise from this year. And then we've got to get it down half again, by 2030. And I don't think based on the fact that our tomato is six to eight tablespoons of oil, we quite graphs, how we can do this and what this is going to look like and what that's going to be about, and we're all basing our society on GDP growth.

You know, I'm constantly seeing people in every company I've ever worked on, what is our strategy, and they put up growth, growth, growth, and I'm like, well, that's imaginative. But they're the VP saying, this is what we're doing growth. But growth doesn't take into account the price you've paid for this the growth of the oil companies doesn't take into account the price we're all going to pay for it. So, we're going to have to think about how do we do that with GDP? And how do we mix in the price you pay for it through the resources that you're using in your finite world that you want infinite growth from?

So, here's another problem, we've all got carbon literacy. You know, the reason I went back to university because I didn't know what anyone was talking about, what is Net Zero? You know, it's a stupid thing to say, in a way, because it doesn't make any sense. It's not something your average man is going to go, yeah, Net Zero. I ask people to have what is Net Zero mean? Well, sort of means like, you don't emit as much as you put out or something. But all it means is we can't keep adding CO<sub>2</sub> to the atmosphere, we have to take it out as fast as we add it in some shape, or form and all around the world. Why you see people compensating with forests, and mangrove swamps and peat bogs that are being developed is because those are the things that suck the CO<sub>2</sub> out of the atmosphere. And our carbon footprint was a BP construct.

As you mentioned, in our conversations on LinkedIn, you know, they decided, let's make it everyone else's problem, the individual's problem, you're the problem, because you eat a tomato from Spain, right? But it's the price we're

paying for carbon footprint is the price we're paying for our activities using energy, that this was something that was quite a revelation for me. So, fossil fuels are 100 million years of energy captured, that we just burn in a moment. And as soon as I understood that I was like, Okay, this is why we can't do this. In the way we're doing it. Because we're cheating. But we need to cheat because we're all used to this world. Now, we so how are we going to do something?

**Joe Hage:** I'm curious show of hands, how many of you have heard or internalize the phrase carbon footprint? Have you ever thought, what's my carbon footprint? I want to reduce my carbon footprint, anyone? Yeah, you're just raising your hand because everyone else was. Anyhow? Yeah, this was this was a PR campaign.

**Michelle Sullivan:** Yeah.

**Joe Hage:** By the big oil, saying, hey, you know, just don't look behind me just you guys have better recycle, which is a pittance relative to well, in two major infrastructure.

**Michelle Sullivan:** Absolutely. So, you know, but we work with big companies that can do things and they are doing things. And you know, by the way, the single biggest contribution you can make to reducing your own carbon footprint, is you have one less child. It's too late. It's too late. It's too late. So why healthcare why is there this big focus on health care? Well, health care is a big emitter, right healthcare, 4.4% of global emissions are from health care. In the UK, 5.4% of emissions are from healthcare. And that's twice as much as air travel, by the way. So, the NHS with its Net Zero plan cares about travel and transport. It's outside, you saw that term greenhouse gas code protocols. The greenhouse gas protocol is those scope one, two, and three things I've talked a bit about in a minute, but travel to and from their sites, three and a half percent of all the traffic on the rise in the UK is because of the NHS. So...

**Joe Hage:** You're saying part of their plan is hey, everybody be more ecological when you come to our office?

**Michelle Sullivan:** Yes.

**Joe Hage:** And I'll walk or take bicycles.

**Michelle Sullivan:** Yes, they're electrifying. They're electrifying all of their, all of their own fleet. But also, they're going to start measuring into and out of sites, right. So, if our reps are driving diesel cars, pretty soon, that's going to be not allowed. Right.

**Joe Hage:** You know, you talked about my skepticism before you came up. Electricity still is energy has...

**Michelle Sullivan:** Absolutely, absolutely, absolutely been.

**Joe Hage:** Our electric cars and being an ecological how much...

**Michelle Sullivan:** So? Yeah, so well, the thing about electric cars is they can be powered with renewable energy, but you've got a problem with building them and throwing them away. And that whole ethos, you know, the real thing we should be doing is just having a car on our street that we all share and stuff like that. And eventually, weirdly, especially if you live in cities, it happens in Brighton where I used to live, you know, there's a big carpool. The loads of people don't have cars, they travel on public transport, and then when they want to do a particular journey, they use one other classroom or carpool. It sounds like crazy to us now, but this is the way it will go. But we both saw the talk the TED talk on electric vehicles right now. If you're thinking about being the best you can be, you should have a hybrid vehicle because it uses a little tiny battery. But you actually save your emissions in those short-term journeys. And also buying electric vehicles that are big. There is a point to that for society, because all of that stuff will come down in cost and come down in impact, the more and more. So, if you can't afford it, maybe you should be doing it.

**Joe Hage:** You mentioned growth. Well, electric vehicle companies talk about their growth, but I'm given to understand that if we were to make the projected number of vehicles that they each say they will do, they will not be enough lithium on the planet to make those batteries, right. It's simply not going to happen.

**Michelle Sullivan:** Right, so we're in this place I was talking earlier about. I like in this moment to when you're I have never been in one, but I do know someone who has in a tsunami while you're stood on the shore, and the water is going out. And everyone's stood there going, what's going on? What do you think we should do? Right? And we're about to be hit with the big tsunami and

the things you're describing are the reality of what we going to have to do. But in our short term, now, what are we gonna do, we're gonna get in the right headspace. And we're going to start thinking about how we can do this better. And there's simple principles to do that. So, people aren't ready to hear only one of you on the street and have a car, or none of you need to street living in a car or living in the city. You know, they're not ready to hear that.

**Joe Hage:** I'm going to steal myself from saying anymore. I'm very interested in the slide where you say how Boston Scientific is going?

**Michelle Sullivan:** Yeah.

**Joe Hage:** That's zero.

**Michelle Sullivan:** Yeah, well, I'm not going to exactly say, because they'd have to, you know, I can say it, but then they've had to kill me. So, here's what the NHS has said, right? Deloitte did this with them. I know the guys at Deloitte because they talked on my course. And I sent a LinkedIn invite. And I said, let me talk to you afterwards. And the guys at Deloitte there said 56, other health systems are currently working with them to do this. So, this isn't just the NHS. So here are the ways that they are moving towards Net Zero. With their own direct and indirect emissions, which are not the bulk of emissions, these are the things that you're in control of in your company. And in your NHS or in your health system. We've talked about some of those already. And I'll talk about some more of them in a bit. And then there's the indirect emissions. And that's all of us. And anyone who makes medical devices, anyone who makes medicines, anyone who serves the NHS through its food or building things, all of their emissions, and then there is that pesky travel group there for us to think about. So, here's where they're going to get their emission savings from in the plan that's going to be in 56 countries near you soon. And here is the bit that's us as medical devices. It's a big part of the expectation. It's written into procurement law, they are mandated to have at least 10% of their tenders from now on, which must have a fighting climate change aspect to it. And one tender came out recently, which I haven't gels, but it was 90% on this.

**Joe Hage:** Susan, the x-axis on the previous slide was impossible to read. Could you tell us what we were looking at there?

**Michelle Sullivan:** I don't know. Because I'm now going the wrong way. How do I hit the left side of the window, but it's going the wrong way? Could you come and help me?

**Joe Hage:** Yes. We can always edit out this part of the presentation.

**Joe Hage:** I didn't mind. It's just pressed the left and went right. We're sorry, let's get back up to what you were talking about this one way.

**Joe Hage:** Yes, but now I can answer my own question. I could just look. Oh, I can't even this is too small.

**Michelle Sullivan:** What does it say? It says non pharmaceutical suppliers. On the next one is pharmaceutical suppliers. So these two big bars, med devices

**Joe Hage:** what does that mean practically?

**Michelle Sullivan:** That means without us reducing our emissions as suppliers, proving that they're doing so, and changing how we go about our business in the NHS, they will not hit their target. So the more we get through the years from now, the more extreme that will get and there's a plan, you know, so apparently by 2027, we'll need to know about the carbon footprint of our devices and there'll be making decisions as to whether well you can On the framework, we've got a bit of extra time today, we can go on the framework if, if your carbon footprint is less than what you're replacing, this is where we're going. So, you know, this is us, Company X. These are the things you have to think about your fleet, your fossil fuels, your generators, chemicals and refrigerants, you're using the purchase electricity for your real estate. That's the easy bit. So we're all changing our key distribution and manufacturing site, Boston Scientific are to renewable energy. We've reduced our emissions by 50% in these categories in the last five years, we've got a load of our manufacturing and distribution plants all totally powered by renewable electricity. We manufacture in Ireland, we manufacture in Costa Rica, these are all places where you can do this, Costa Rica is amazing. They've been on to this for years, environment, carbon footprints becoming they are going to Costa Rica as a country are aiming for carbon neutrality by 2030, full stop, there won't be an emitter anymore. Denmark's another one. And the way that you do it is through some principles that we're going to talk about. But this bit on the left is the easy, but the majority of your emissions are going to be on the right, at least 60%, I would say 80%.

And these are the things that you're going to have to deal with field force travel, employee commuting, everything you purchase in the companies you purchase them from, and they are actual emissions in creating what you're using operational waste, device disposal, using devices, healthcare professionals, shipping of your devices. So now you can start to think okay, well, this isn't all about plastic and precious metals. But interestingly, we did a lifecycle analysis on one of our products, it's quite expensive to do a full lifecycle analysis, what we discovered was that 25% of the carbon footprint of that product was in the platinum tip 25% of it was in the gold, that was embedded in the circuit boards. So half the carbon footprint of your devices, the precious metals are in it, and the other half of the plasticky stuff, some of which are mixed polymers that you cannot recycle. And all of it is built not with breaking it down in mind. So, you could snip the tip off, and they do so managers, hospitals, snip that platinum tip off, and they recycle it and they get the money back for it. This is quite groundbreaking and there are companies out there that will do this.

But they won't do it for 10 devices, or 30 devices or 100 devices. We're looking at recycling some of our products. And they're doing things as loss leaders at the moment, and only one company in Germany would touch it rather than the thousands that exist because it wasn't big enough volumes for them. So, we're all going to have to clump in it together to do that. But this is how you move in that direction. Joe, right. You take what your stuffs made from, and you don't do that. That is our linear economy. That is what we do right now. And going back to my first slide of only a madman or an economist thinks you can get infinite growth for a finite environment. And your point about lithium, it's all the same thing. You can't just dig stuff up forever and chuck it away. There is no landfill left in Europe. Xero only found that out last week, I couldn't believe it. So, we either burn it, or ship it somewhere else. And they're stopping that now. Because they you know, it's just a mess in third world with the world rubbish going around there. So, this is what we've got to do. Gotta get our heads around a circular economy. And this is not difficult to understand. It's just not what we do now, but we can do it, we can do anything, right? We can make amazing single use devices from platinum and gold and plastic. So, we can easily do this, we make things you use them; you might reuse them. You might use them for longer than you did before. You might remake them. You definitely recycle them, and you reduce how many of them you need to have. When you talk to the healthcare leaders in the UK, we will have to move to prevention, we will have to move in that way. But that doesn't mean we're not

going to need medical devices. That doesn't mean they don't have to be sterile, that doesn't mean that They don't have to be safe.

**Joe Hage:** I'd like to see the rest of your slides if you could.

**Michelle Sullivan:** So here's our challenges, packaging. Already in the Nordics, we're being asked to be responsible for our packaging. Take it away, we don't want it your problem, we're buying your goods, not your packaging, single use and composition of them. So, we're gonna have to use precious metals, we're gonna have to use plastics. This is how we do things. They're good in terms of the patient outcome. So what plastic are we're using? Does it have to be a mix polymer? Could it be a single polymer, which can then go to recycling and aesthetics? Big, big focus on that now? Does your thing mean you use less anesthetic? Could it be local sedation? Because that's one eight hundred of an anesthetic gas a big part of the carbon footprint, travel? How are we getting to and from? Do we need to travel? Could we do stuff remotely? Could we count how much of the non-travel incidents there were when you're training your clinicians or getting your sales force to support

**Joe Hage:** In the interest of time, so we have time for interaction with the group. It also says distribution and supply chain waste and disposal, quality and safety. If you could the next slide.

**Michelle Sullivan:** Yep. So these are things we have to do become carbon literate, know what you're talking about, take a bit of time, it doesn't take forever, I've managed it. And I'm not a genius, right? Get your culture to get into the headspace of it, start talking about it, start getting people to come and talk to you about it. People from other industries, people who've had success, join with other companies, you want to achieve the same as you who maybe aren't competitors. Follow a framework to set your targets follow a framework to disclose on progress. And just remember, and we'll finish on this slide, right? Every hour of a procedure is 30 kilograms of carbon of greenhouse gases. So, if you're doing something that shortens that, that's a good thing. Every night a patient isn't staying in hospital, because of what you do is between three and 13 kilograms of waste. Every time you remotely monitor or follow up a patient that's on average 18 kilograms, you can count this, you can show it, you can demonstrate it. So, think wise and think patient pathway and you've got a route to improve things as we go along.

**Joe Hage:** I appreciate the conversation; I think yours is in an enviable position because it's so easy to attack the premise. Because your presentation largely said we really need to we should soon we will have to. And like you said, we keep putting it off and putting it off and putting it off. I'm reminded of and I don't remember the specifics of it. But have you ever heard of the prisoner's dilemma? I know you did. Because we learned at school. Were basically like, if you both agree to tell the truth, there's a good outcome, if you lie, and you tell the truth, and you're going to really make out okay? If you do the same, then you're going to make out. And if you both choose to make out really well, it's going to be catastrophic for you both. So do you both like honestly? Or one of you lie and put the other one in jail forever? That type of thing? And who among you? Just show hands? How many of you own a car? Everyone? You don't own a car? Are you? Okay, how many have more than one car? Yep, say your motorcycle council. How many of you here just for this initiative, which is very important, are willing to just stop using it or sell it or get rid of it? Thank you, Luke. And so, in this prisoner's dilemma, we're all gonna keep driving, but thank you. That'll help, help definitely help the environment. And so yeah, I mean, it's just so even what you've explained, we have to have Boston Scientific materially done it yet.

**Michelle Sullivan:** Well, it materially done scope one or two, and they've got their plan for scope three. So, here's a way of thinking about it. I think about this, you know, like dominos that knock each other over in a line, right? For Boston, we've committed publicly as a publicly owned company, with shareholders to hit Net Zero by a particular time. And we have published how we're going to do that and have those targets validated by a third party. That's nothing to do with that, right. That's cool. So that's base target. That's the Race to Zero. Lots of big companies have signed up to do this. For us to do this. Everyone who supplies us has to be doing the same thing. It's like a domino thing. It will fall bump, bump, bump, bump bump, because without committing to do things in this better way. No one will manage to achieve it. And so, they won't be using Williamstown. Company B, we won't use Company A.

And what we're all going to have to do is think, okay, well, when we're recycling our stuff, we're all going to have to come together for that, but because we can't do it, and this is how it will go. And you know, think back 30 years ago, what was going on there? We were talking about it earlier, you know, I was driving around in a car, I had to stop at a phonebook box, to ring my boss once a week, right and tell him what was going on or if something crazy could

happen another day, I filled out all my call sheets on bits of paper, and I posted them off. So that was 30 years ago. So how much difference is going to be 30 years ago, you always underestimate the change in 10 years and overestimate the change in two years. So, this is sort of going to happen.

**Joe Hage:** Anyone want the microphone? Introduce yourself.

**Ed Cappabianca:** Hi, I'm Ed Cappabianca, CEO of a small med device company. I'm going to be talking later. So, two quick questions. Number one, how much in your view and your because you've been talking to the NHS? How much of the NHS is decision making? When purchasing devices, particularly new devices? Does any of this feature?

**Michelle Sullivan:** Yeah, so that's, that's in all tenders 10% of the weighting has to be from 10%. So at least 1/10 of what you're being sort of measured on will be something along the lines of this, at this moment in time. And then in five years from now, it will get much more stringent. So you've got five years to sort of get your act together. You've got to show willing at the moment, I would say you've got to show that you're thinking about it. And you've got to come up with ways where you're reducing things in some shape or form.

**Ed Cappabianca:** My second question is because we are in a new device, is it right, fair and proper for us to say, you know, the old. Well, I don't have to run faster than the bear. I just need to run faster than you. Yes. If I compare what our device does relative to what they're using today, yes. Is that good enough?

**Michelle Sullivan:** Yes, it is. And the more you can articulate that, the better, because we're at that moment where the seas going out and no one knows what's going on. Right? So if you can start to articulate it, well, you'll be doing better than everyone else.

**Joe Hage:** Anyone else?

**Michelle Sullivan:** I'll give you an example. Very quickly,

**Joe Hage:** Please.

**Michelle Sullivan:** One of my I sit on the ABH. I'm the head of the chair of our sustainability group. I also am the vice chair of the commercial policy group. I'm very commercial, I'm not, you know, you know, a sandal I'm wearing sandals. But you know, I, I am commercial. I spoke to my colleague who's the

chair about this. And the next day, he came back to me and said, Michelle, you'd be really proud of me. I got rid of a million plastic bags overnight. We sent our tubing around that isn't sterile, in a plastic bag that wasn't necessary. We just put a little clip on it now and send it off 1 million every week. So, you can start to articulate this, then that's what the HS wants to see. And the Nordics and the Nordics are getting more into substances as well. So, it's gonna be tricky. It's the wild west, but articulate it, pay attention to it, measure it, think about it. So, all you have to do right now.

**Joe Hage:** Michelle Sullivan, ladies and gentlemen.