KEELVAR
MOVE FORWARD

WEBINAR TRANSCRIPT

Sourcing & Sustainability - Gearing Up for Scope 3 Emissions

Recorded from a Presentation on December 14, 2021

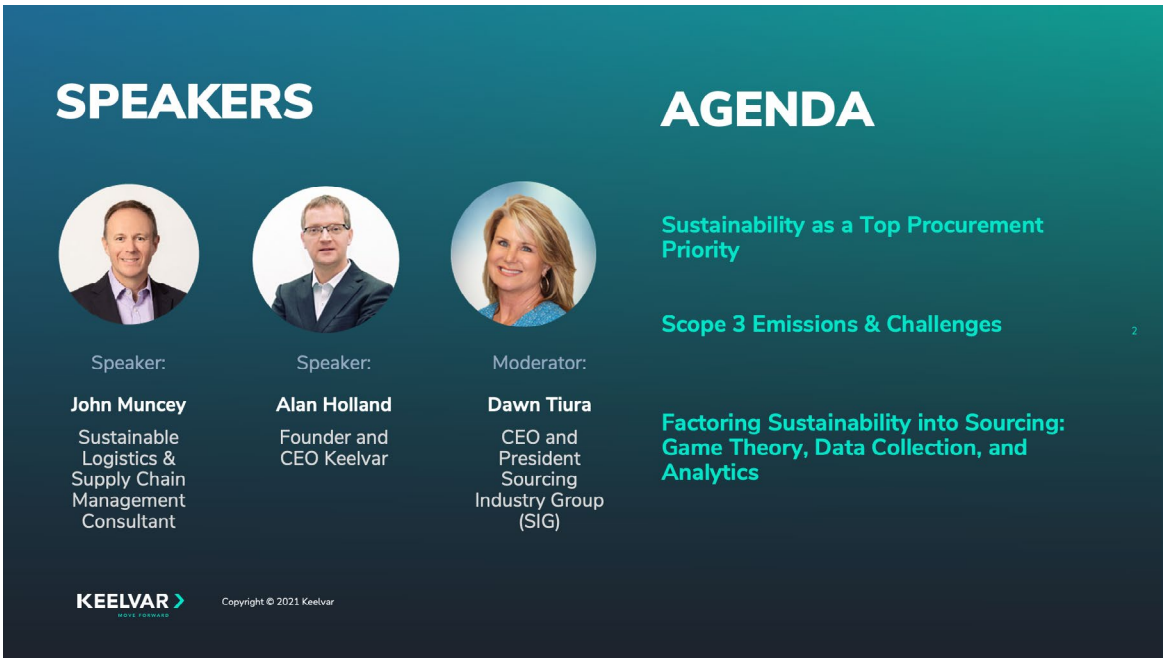
Sourcing & Sustainability - Gearing Up for Scope 3 Emissions

The following is a transcript, edited lightly for length, from a panel discussion among the following speakers presented on December 14, 2021. The full recorded program is available on Keelvar's website.

Panelist: **Alan Holland, Founder & CEO of Keelvar**

Panelist: **John Muncey, Sustainable Logistics & Supply Chain Management Consultant**

Moderator: **Dawn Tiura, CEO and President of Sourcing Industry Group (SIG)**



Dawn Tiura,
CEO and President, Sourcing Industry Group (SIG):

Welcome, everyone. Today we are here to talk about sourcing and sustainability and gearing up for Scope 3 emissions. This is a subject that I'm passionate about.

Joining us today we have John Muncey, a 30-year veteran of global logistics and supply chain management who's now working as a consultant on how to drive sustainability in those areas for the greater global good. He recently completed the University of Cambridge Institute for Sustainability Leadership program in Sustainable Supply Chain Management. Most recently, he was the Group Vice President for transportation logistics

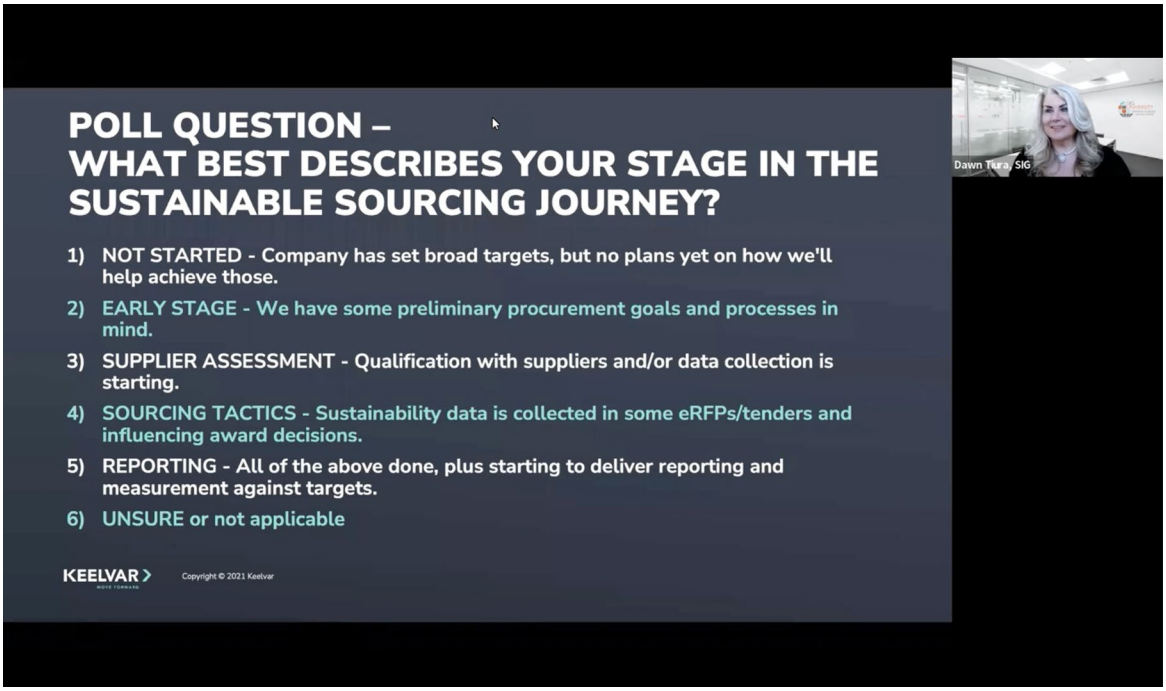
at ABB where he worked for nine years and was involved in the application of Keelvar for sourcing optimization solutions.

Joining us also is Alan Holland, founder and CEO of Keelvar, a software provider of sourcing optimization and automation solutions for global businesses. He was previously a lecturer in artificial intelligence at University College Cork's computer science department, where he left the university to commercialize advances in AI for procurement.

In addition, Alan is known as a thought leader, and I have been constantly impressed with his knowledge and passion about AI and how it can transform suppliers that engage in big business for win-win outcomes.

I'm the president and CEO of Sourcing Industry Group. I was previously a CPA before I got into sourcing and fell in love with total cost of ownership, which was my direction in and now my passion is elevating the industry. And we've got to do it through sustainability. We have to build it into our supply chains.

So we're going to start with a poll. Where are you in your travels through sustainability? John and Alan, what do you think the results of the poll will be?



Alan Holland,
Founder & CEO of Keelvar:

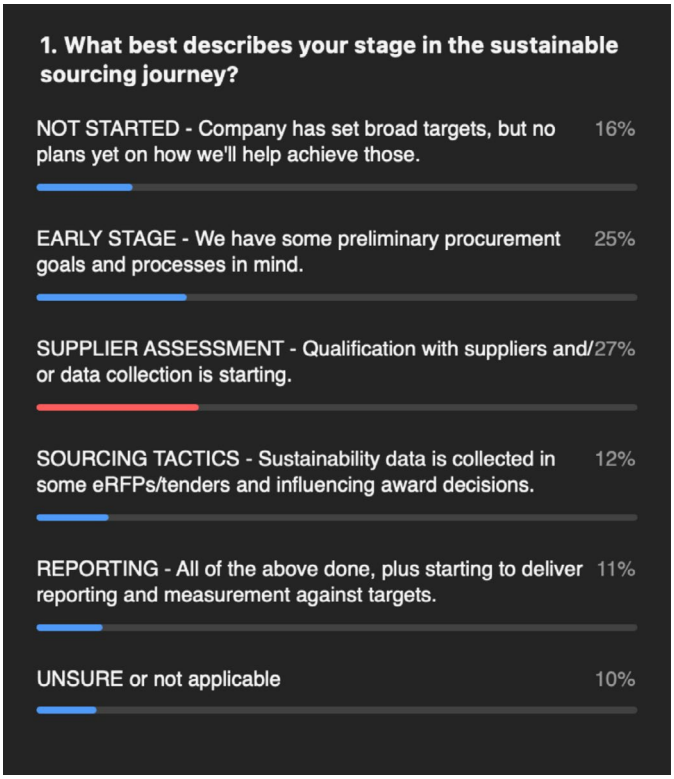
It will be interesting to hear but I suspect that most companies haven't started or are still at the early stages of their journey when it comes to sustainability.

John Muncey,
Sustainable Logistics & Supply Chain Management Consultant:

Yeah, I fully concur. I would imagine there are not too many that are ranking five or four. I'd be very happy if there were but I think it's a really interesting poll. This kind of helps us understand our audience better, and hopefully tailor some of the information we're going to give you over the next 45 minutes. So we can try and speak to your challenges today that you see and your maturity in your sustainable supply chain journey.

Dawn Tiura:

Here are the results of the poll. Gentlemen, can you comment on this? Are you surprised?



Alan Holland:

I am a little surprised. I was expecting more "not started" and more "early stage", which is good to see.

John Muncey:

I'm pleasantly surprised. The fact that people have done something and already have assessments in place and are building in tactics for sustainability is interesting. But of course, the devil is in the details, and it will be interesting to see does that actually extend to Scope 3 or not? Or is that mostly Scope 1 or Scope 2? But it's very interesting and it's also really encouraging to see such positive results.

Dawn Tiura:

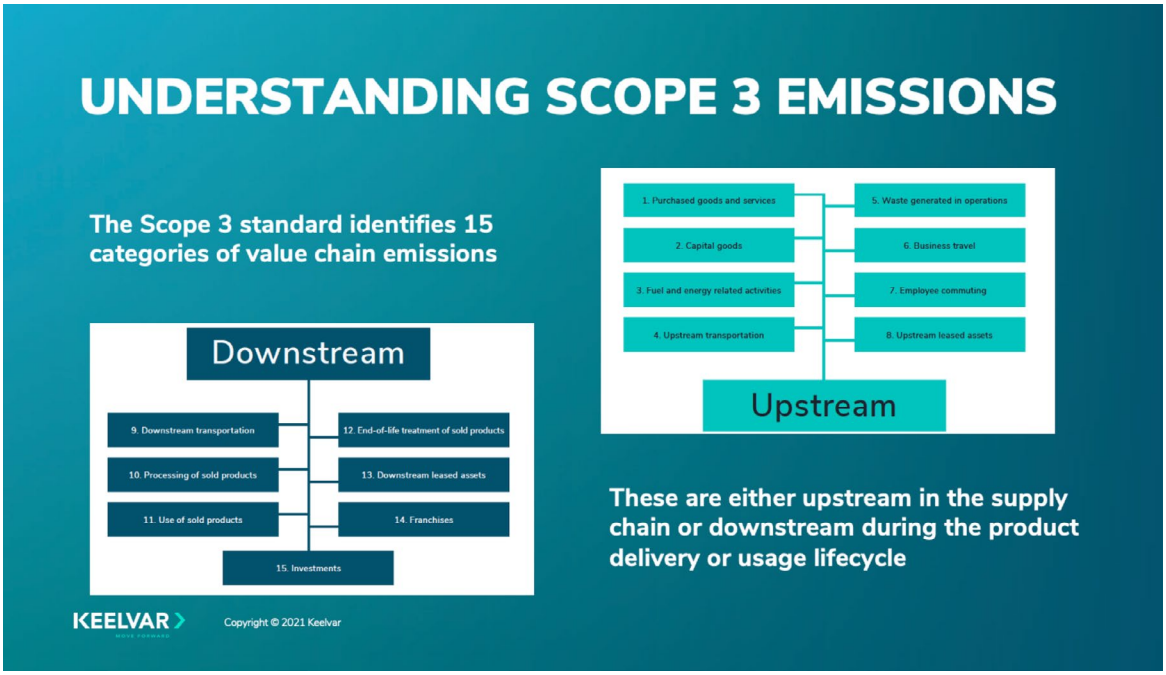
I would love for you to share the difference between Scope 1, Scope 2 and Scope 3, just to make sure that everybody is on the same target.

John Muncey:

Scope 1 and Scope 2 are those emissions that you produce from within your own operations. Effectively if you're a manufacturing company, it is the emissions that you produce in manufacturing your product within your four walls, and including any transportation that you operate yourself.

Scope 2 is your energy source. So it's what energy sources you are using to actually allow the manufacturing process to start to take place, and companies that are actually involved in sourcing sustainably, some have targets for Scope 1 and Scope 2.

Scope 3 on the other hand is those value stream emissions, the value stream being those upstream of your suppliers and downstream in the distribution of your products, goods or service to your customers. And those are the ones that you don't actually control today – there's your subcontractors or partners, yet they're the ones that actually account for the majority of the emissions, and they're the ones that we need to focus on in addition to Scope 1 and Scope 2 if we are to get towards net zero.



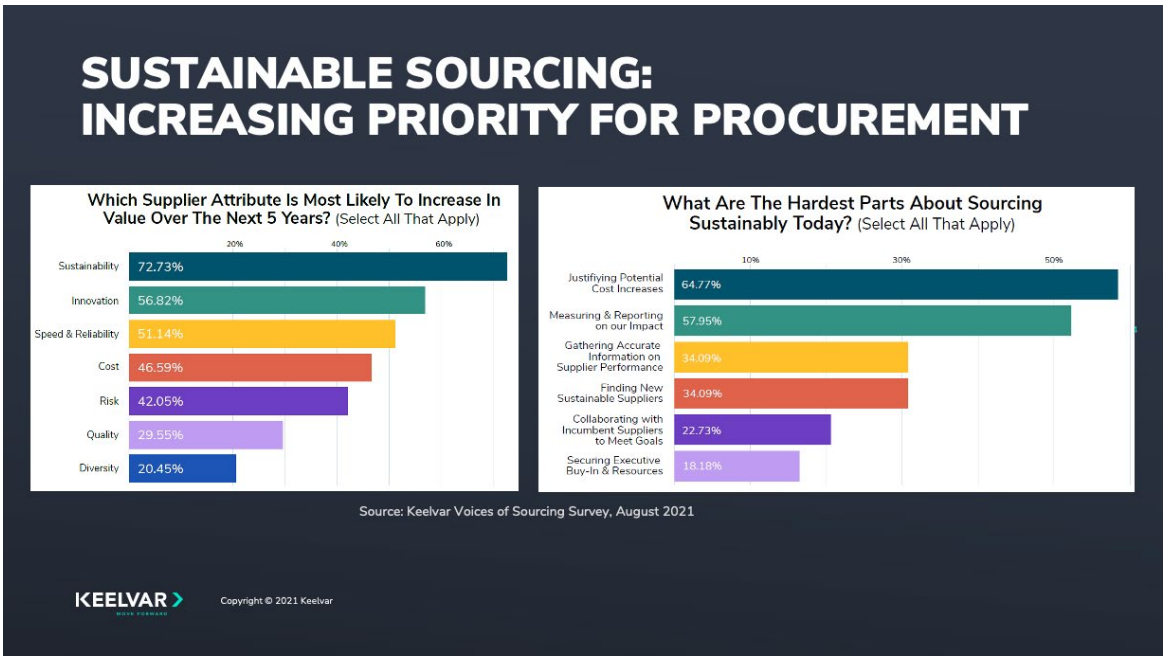
Dawn Tiura:

We have to get this language more in the mainstream. We talk about emissions, but we don't – at least in North America – have a lot of conversation around Scope 1, 2 and 3. So I really appreciate you just grounding us in that example. So Keelvar just recently did a survey, maybe you could share some of your insights from the survey, Alan?

Alan Holland:

Yes, I think we were struck by the results of this because it involved over 100 sourcing managers being surveyed as to what they saw as being most likely to increase in importance over the next five years. Despite the fact that we're in the midst of a pandemic and the supply chain disruptions we're all witnessing are such an acute pain point, it's sustainability that received top billing. I think that's indicative of the realization that this is a nettle that needs to be grasped.

A lot of companies may not have the solutions to solve all the problems that they're witnessing in this domain, and how they will develop tactics to reduce greenhouse gas emissions. But they have realized to a large extent that it does need to be addressed as a priority.



Dawn Tiura:

I love seeing sustainability at 72%. John, are you seeing this across the board?

John Muncey:

Yeah, I would probably summarize it, looking into two aspects. Resilience is one, given the pandemic that Alan mentioned too. And I think that has kind of awoken the need for sustainability and making sure your suppliers are in business for you tomorrow, next year and beyond.

But also kind of the ability to predict and get the visibility of your supply chain today I think is key. The flip side of that is that people also look to sustainability with regards to ESG and the environmental performance of suppliers. I would say that probably the 'what' is clear – we know about sustainability – but we don't necessarily know how we're going to get there.

I think the timeframe of five years, that's probably why it's something like 72% of people understand the 'what', but not necessarily the 'how we're going to get there'. There are companies that have plans, the early adopters taking a first-mover advantage in this, but I think we are seeing a rapid awakening of all companies across most of the major industry groups who are putting this front and center of their agenda.

Dawn Tiura:

Part of the survey asked about what is the hardest part of sourcing sustainably, and cost was a big factor. Can you comment on this?

Alan Holland:

Yes, I think it's very interesting to see that the top issue or barrier that's perceived by those in sourcing is the justification of potential cost increases. That speaks to perhaps a misunderstanding, and that driving sustainability may actually lead to cost decreases if done well and that there are opportunities.

"There are some wonderful opportunities within this space for generating cost reductions, but also appealing to the increasing consumer awareness out there around the need for sustainability."

And that most companies with brands, and maybe consumer brands, if they are tackling this agenda successfully, there are great opportunities here too.

Dawn Tiura:

So do you think it's an excuse, it's a reason to delay?

Alan Holland:

No, I think it's a genuine fear. I think that many in procurement have been working with an agenda; their priorities were always around managing costs and managing speed and deliveries and quality of goods and services. And they feel that if this is another requirement – usually when you start constraining systems – the costs could go up. So, there is a justifiable concern that this may be the case.

There are spending categories where cost may increase, and you've got to manage that as effectively as you can, but there are other areas where you could actually see opportunities arise. So it's partially justified.

John Muncey:

Maybe I can answer that dilemma as well with a concrete example. Look at transportation for example, at the moment, we have sustainable aviation fuel. It's in microscopic quantities, but it's there. So it is possible today to fly an airplane commercially on 100% sustainable aviation fuel.

The cost of that fuel though is significantly more expensive than the fuel with which it replaces, and therefore there is possibly a lead in certain sectors where cost may increase for a period of time until we reach scale.

However, I think if you look at it in reverse, is it an opportunity or a cost? For me, it's an opportunity to think differently, and it's an opportunity to redefine that supplier relationship.

What I see that this is doing to those who are most advanced in this journey is redefining the relationship procurement has with suppliers, and it's redefining that relationship between the conventional customer-supplier relationship whereby you're almost forced now if you extend it into circularity as well, to work far more closely together in true partnership than you have done before.

Specifically, if you look at aviation again, or if you look at shipping, for example, airlines and ocean freight carriers need to make significant investments, and they need to book those vessel manufacturing slots now with future technologies. To do that, they need a commitment from customers. So looking for that commitment upfront and that partnership and connection to allow them to inform the justification for investments.

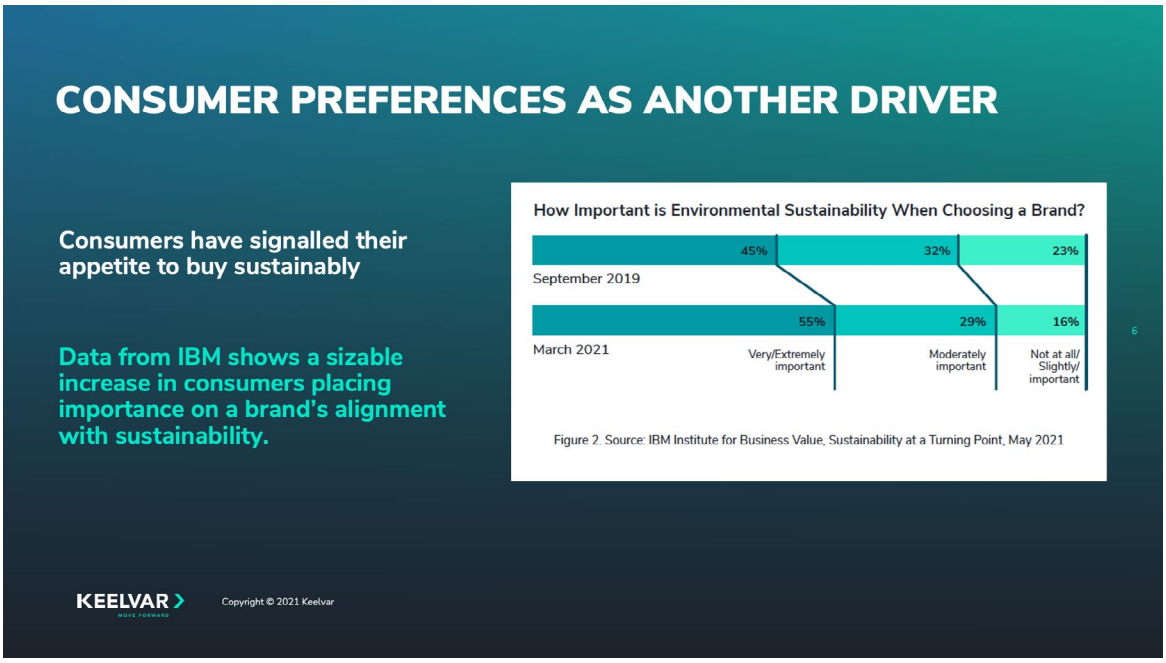
I think that's one of the other reasons why Scope 3 is so important because Scope 3 is your suppliers' emissions.

"And it is implicit upon companies today to try and work and reshape that relationship so that collectively people are working hand-in-hand and see this as an opportunity to improve and rethink the way that things are done."

And not simply a supplier saying "well there's a cost increase" and passing that on to the customer, as conventionally may well have been the case.

Dawn Tiura:

So customer preference now is extremely important, and maybe it's because the baby boomers are trading out of the system and the younger generations are much more in tune with sustainability, but it makes a big difference. And it's heartening to see that we're going to see consumers placing more and more emphasis on it. So maybe you guys could comment on this as well.



Alan Holland:

"There's a clear trend amongst younger consumers in particular to prioritize brands that are aligned with the sustainability agenda."

So I think many forward-thinking companies are seeing this as an opportunity. So those companies are keen to look at their Scope 1, 2 and 3 emissions and reduce those, so that they can credibly claim to be working towards, in some cases, some science-based targets that are, I suppose, ambitious but achievable.

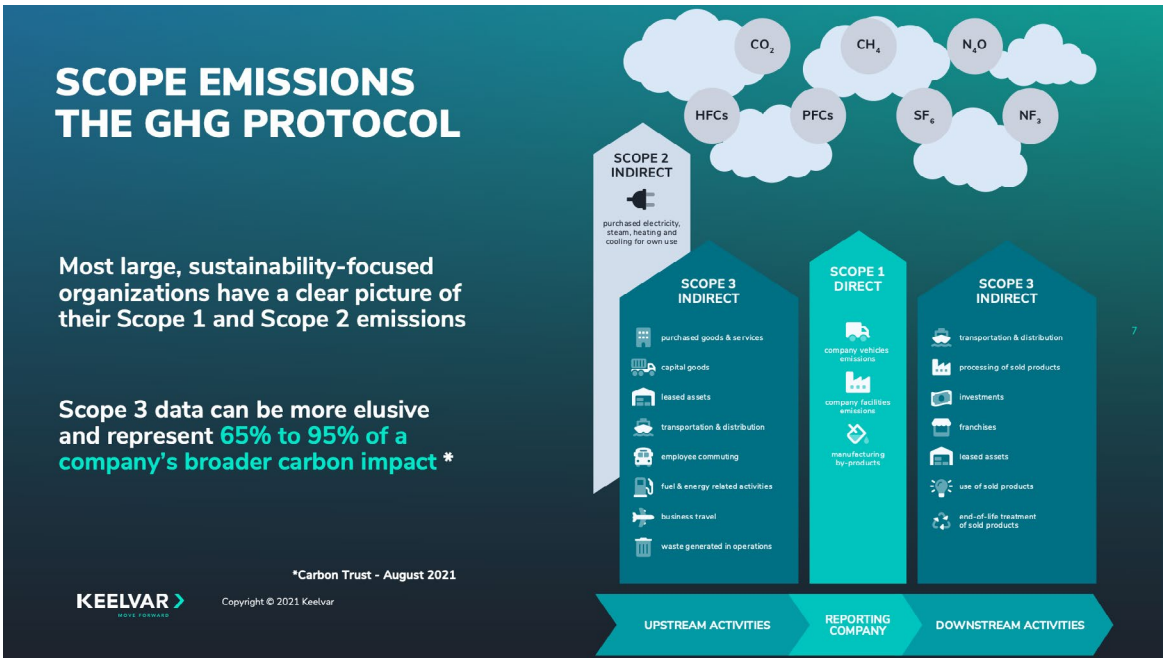
Dawn Tiura:

So let's get into some of the meat of the study then. Scope emissions, the GHG Protocol, I think this is so important. John, can you hone in on what we're going to try and focus on here.

John Muncey:

Okay, so GHG protocol defines emissions within your supply chain. As I said before, Scope 1 is those within your own four walls, Scope 2 is the power source you use. Your value stream of activities, Scope 3, is indirect, upstream and downstream.

Today the number of companies that are actually tracking and publicly committing to science-based targets is incredibly small. I checked yesterday, and only 2221 companies globally have registered as taking action on the science-based target website right now. And of those, only 1118 have actually made binding commitments to meet 1.5 degrees centigrade, which if you remember from the recent [United Nations Climate Change Conference] COP26, we need to be well below 1.5 degrees to protect the planet that we live on today.



With that being said, it's obvious to a certain degree why companies that are tracking emissions and are starting their sustainability journey are focusing on what they control. Of course, that's far easier to focus on. But Scope 3 represents 65 to 95% of additional opportunities.

So if you are the manufacturer of, for example, a cup, your emissions in the production of that cup could be minuscule, but the supply chain of raw materials into your country and

then the distribution of that cup to the final customer, that's your product's actual value chain emissions.

If you're only looking in the middle, you're missing that bigger opportunity. So why aren't companies looking to Scope 3? The bottom line is, it's hard. It's not easy.

Some of your suppliers, particularly those perhaps in developing countries, may not be quite as aware as you are as to the opportunities that exist for them to potentially look at cutting carbon within their own operations today. So from a sourcing perspective, for me, it is procurement and the sourcing function, which will help drive this change. Because as I've always said in the past, if you're not measuring, you're not keeping score, you're just practicing.

"I think by embedding targets and working with suppliers to start focusing on their emissions, which are your Scope 3 emissions, only then we start moving the needle towards net zero."

So the first thing would be what is your company's policy? Is your policy within the company to only look at Scope 1 and Scope 2? If you base the science-based reduction target against that, fantastic. But let's not ignore Scope 3 – start working with your suppliers so that they are aware of the requirements you will have in the future for them.

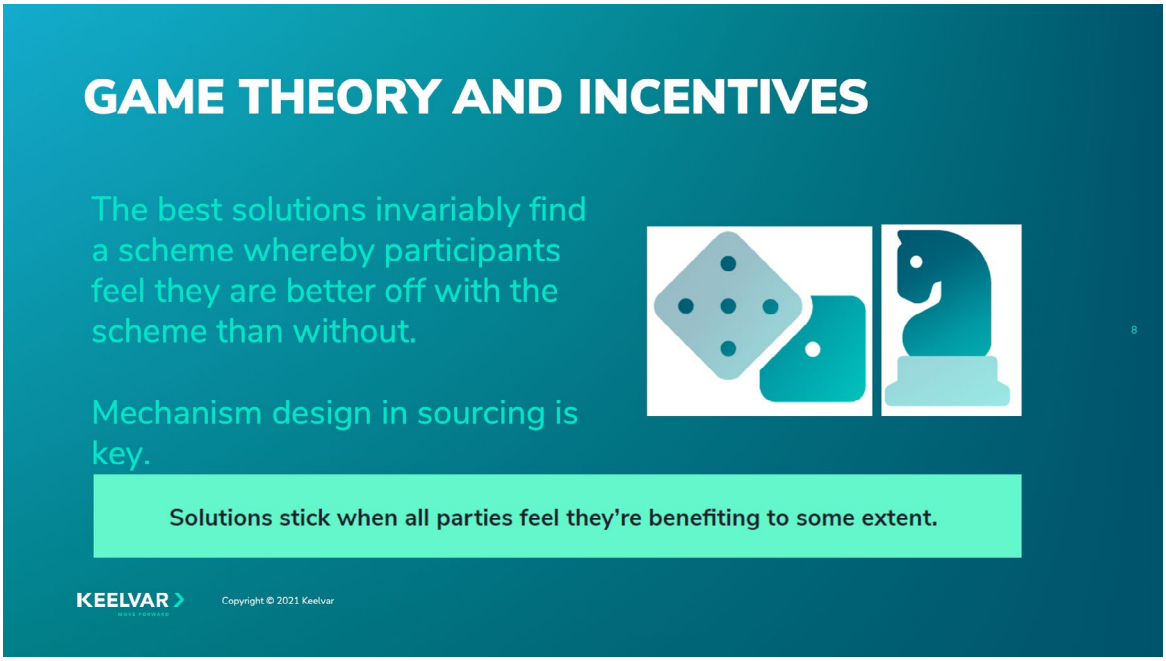
But it's better to have something no matter to a certain degree, how perhaps imprecise it may be at this stage. At least then you have a footprint to start working down from. But if customers do not ask this of their suppliers, there will be no voluntary move from suppliers to start making the voluntary investments they would need if nobody's asking for it.

So I guess my ask to the community is to be engaged with your suppliers even if you don't have Scope 3 emissions targets today in your own company. It's an opportunity to think differently. Can you truly and honestly look yourself in the mirror and say: "We don't need to do anything about sustainability? We can continue to satisfy our customers without the need to improve our carbon footprint while knowing full well that the financial institutions are favoring companies with a clear sustainability agenda and those that show consistency with the UN sustainable development goals?"

To me, it's an opportunity for you to take a leading market position and then to start working with your suppliers to help you get there collectively.

Dawn Tiura:

Alan recently talked about how game theory can be applied to the practical aspects of sourcing activities. So can you walk us through this, because this is a new concept for a lot of us?



Alan Holland:

Yeah, so you've seen game theory in action, but maybe very few of us have studied it. But game theory is the science of strategic interaction, and when you have a situation where multiple parties have decisions to make, the payoffs they receive depend on the decisions others make, then you're in a game.

So be it in a penalty shootout or a game of poker, or if it's a trading situation in supply chains, there's competition, there are individual agents, and these agents tend to be profit maximizers, but there's some who play the short game and some will play the long game. You see the financial markets responding to that. Stock prices of companies that aren't looking to the long game – they're suffering now.

Very often, if you don't realize the game is changing early enough, it's too late.

"So smart companies are playing the long game and investing in technologies that allow them to operate efficiently but operate sustainably."

They recognize that not being sustainable is an existential threat to the survivability of the business.

It is becoming imperative that businesses look at sustainability as being strategically important, and as John alluded to, procurement and particular sourcing are at the nexus of that challenge.

The very heart of the challenge in developing sustainability in your business needs to tackle the issue of Scope 3, because that is where 75-90% of your emissions are. So procurement needs to be talking to suppliers and understanding how emissions are rising and what opportunities there may be for reducing those emissions.

Now mechanism design is an area like inverse game theory: How do you design the rules of the game so that you get the agents who are playing the game to behave in a way you wish?

Mechanism design is all about designing incentive structures. If you want your suppliers to be investing in equipment, practices or processes that are more sustainable, then you have to design the incentives to do so.

So sustainable suppliers should have incentives in the form of winning more business, and those that are heavier polluters should be winning less business. This is the essence of managing competitive bid processes, and when you're going to market, you need to be smarter about how you craft bid events so that competitors get feedback about ways in which they can win that are aligned with your sustainability agenda.

So that means you need to craft this sourcing process multiple rounds in a way so that you're giving them feedback round by round, and directing them in a way so that it becomes clearer to them that if they invest in more efficient processes that reduce greenhouse gas emissions, they're more likely to win more business.

Dawn Tiura:

So now let's talk about the data that we need to collect because we have to ask certain questions through the RFP process. So can you maybe go through some examples of supplier criteria that you would include?

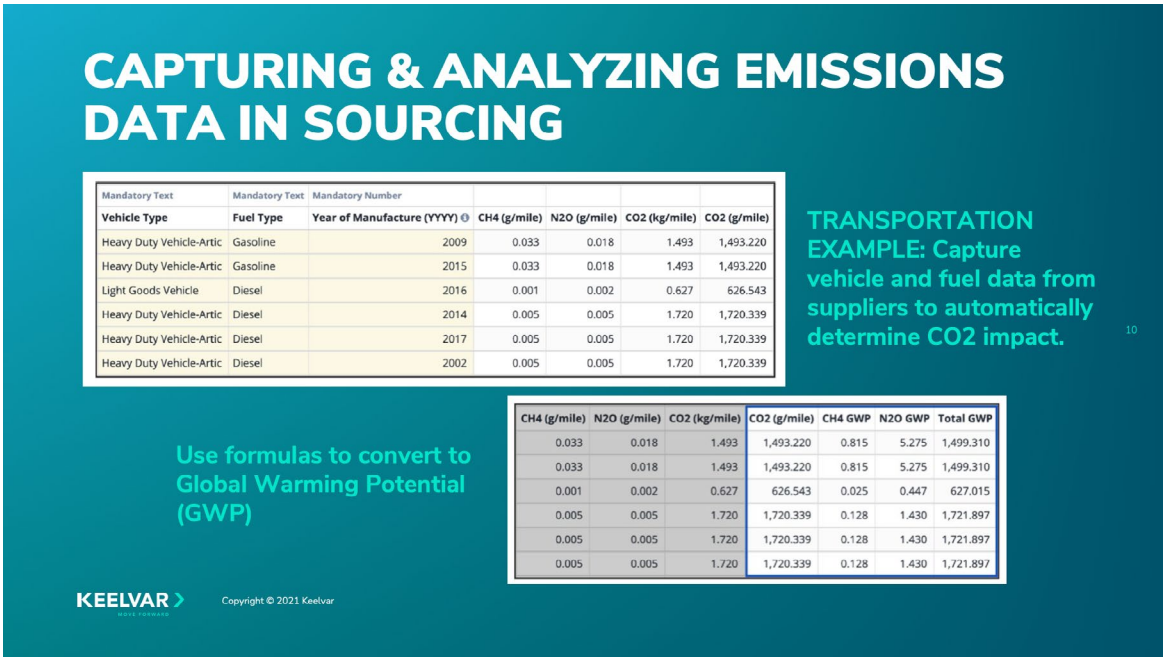
Alan Holland:

So naturally, a question that may arise for those in sourcing is how do we start with this challenge? This means gathering more data. If you're using tools like Excel you're going to have big challenges because it can be challenging enough to analyze the data you're already gathering, perhaps around pricing, quality or delivery timescales. There are all of these costs and non-cost criteria that you use to measure the attractiveness of offers.

Now historically, sourcing optimization has been the tool of choice for companies that were inspecting cost versus speed of delivery. And they would look at those two dimensions and would assess what their trade-offs were between cost and speed, and they would optimize based on the value they placed on speed of delivery.

"But sourcing optimization can be used to analyze cost versus any dimension or get multiple criteria involved."

Sourcing optimization is a pre-existing technology that's ideally suited for capturing information from suppliers about the processes they use or the equipment they use to supply goods or services.



We have the example of a transportation setting. It's really important that you know the type of vehicles that will be used. Does that mean asking them for the carbon emissions for every vehicle? No, not necessarily, because you can make that process easier for them. There are many online resources where based upon the vehicle type and the vehicle age, you can automatically estimate the emissions of certain vehicles and you've got the distances that will be traveled for the supplies.

So you start to build up a richer picture of suppliers' emissions, and it's data that actually helps so you can automatically calculate what the emissions may be involved in something like transportation or production of packaging or whatever you may be sourcing.

You can actually start to make it easy for suppliers and a value to them too, because they're interested in seeing what their emissions are like. And you can use sourcing optimization to automatically analyze the trade-offs. '

"If you have an internal cost of carbon, you can do that scenario analysis very quickly and start to work out where it's best to bias in favor of suppliers who are more sustainable."

John Muncey:

The internal cost of carbon is a very interesting point. There's no reason why companies can't set their own internal cost of carbon, which they can then factor into their bids. At the same time, in addition to cost and speed, maybe you can also look at designing a greenhouse gas budget for your RFQ.

So if you are sourcing item A, whatever it may be, and you've got seven suppliers, two who are already committed to your sourcing sustainability requirements and can demonstrate that today, but five aren't, you might then favor those two suppliers more highly than some of the five who aren't meeting your requirements but have a commitment to do so.

But if you put the greenhouse gas budget in place and you look at the emissions from those two suppliers who already qualified, you may see that in fact, they are emitting more because of where they're sourcing and producing from. Perhaps some of these other five are closer to home and offer an overall lower total cost in terms of actual cost and carbon cost. And therefore you might start looking, as Alan says, to optimize accordingly.

Dawn Tiura:

That is absolutely spot on because total cost once you add carbon in completely changes the outcome that you're expecting from these various suppliers. So I love the idea of that being in your cost models and applied with your own internal cost of carbon.

Alan, maybe you could talk a little bit about how this is calculated in your Buyer's Book?

Alan Holland:

Keelvar deals with many large enterprises, so they're interested in solutions that work at scale, and that's the challenge. So by putting in place a process that structures the

information-gathering for suppliers in a way that makes it very easy for them, you get more buy-in.

Given that there are so many publicly available resources for estimating the emissions per mile traveled for different types of vehicles, different manufacturers, vehicles, etc. you can make it simple for suppliers by allowing them to describe the fleet. And that's an easier question for them to answer than to be trying to estimate the CO2 grams per mile because some of your suppliers simply don't know that yet. But you can actually work that out for them.

With sourcing optimization, you can embed these formulas into your bid sheets and you can have these events designed once within a system and then cloned so that every time you go to market, you're using best practice over and over again. You can even move to automating it.
If you have a design that's very well structured and gathers the kind of granular information you need from suppliers, then you can systematically action your sustainability agenda.

"So it's not just about gathering the data, it's about actioning results that change how you do your business and who you do business with."

John Muncey:

As Alan says, this is standard information that is available. It's not 100% precise, simply because at the moment if you think of a 24-ton truck, for example, how full is that truck? You don't know. So these are averages and we are missing today, primary data captured from the truck itself. And there are various unions that are somewhat resistant to giving over real-time data.

What this gives us is a proven baseline with which to work from and then to be analyzed with your suppliers post-award the reality, and actually they should be going down from this and optimizing thereafter. So that ultimately you can show there is value in that relationship. And I think this is really key. This gives us a baseline because of where we need to get to, which again changes the relationship between buyer and supplier to one that partners effectively.

Alan Holland:

And that's an important point John made about the granularity of information. The more granular you can get on the data, even down to I suppose the weight of the truck and how heavily loaded it is, then the better you can get at managing this.

John Muncey:

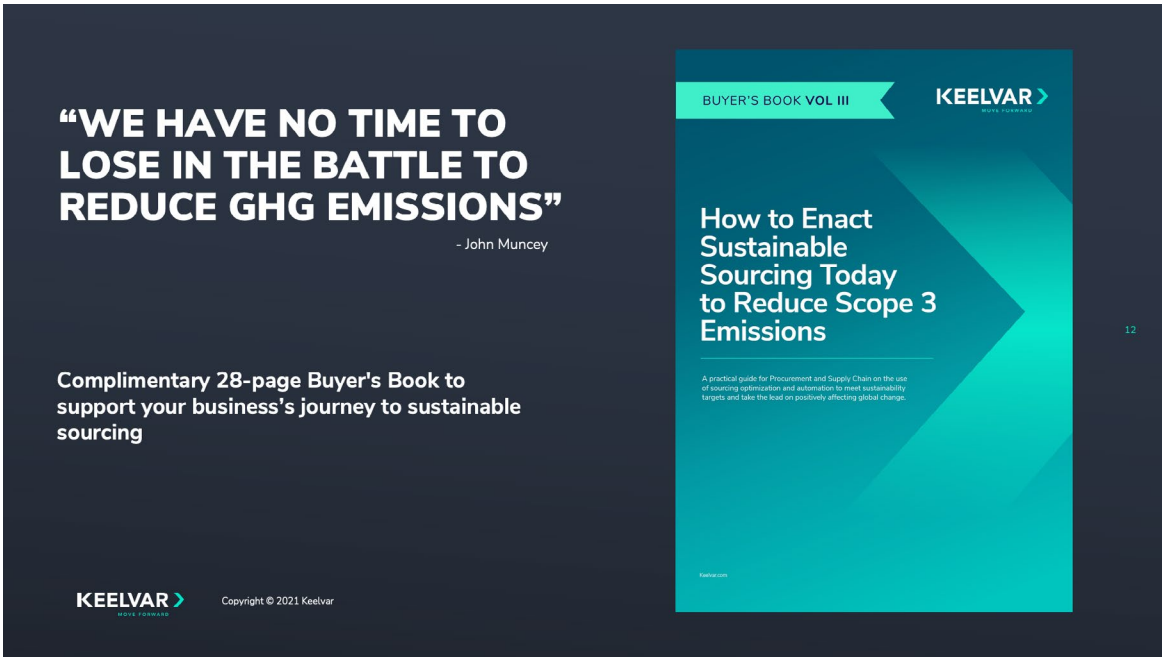
100% agree. if you're looking to companies who either running their own fleets or companies who are subcontracting and who are entrusting that service to a third party

– if they are designing routes and they're able to then plan the loads accordingly, that as you correctly say, and gives you the most accurate data available with regards to the emissions that are expected from that vehicle.

Another reason for this is that we have to look at this internally ourselves first. We cannot today expect technology i.e. electric trucks or hydrogen trucks to come in mass scale in the next seven to nine years in the sufficient quantity that we need in order to seriously impact carbon reduction.

It's going to have to be using trucks more fully, making sure they're running as optimally as possible, making sure there are backhaul opportunities available as well. And this platform allows you and your suppliers to start collaborating to show what the actual emissions were on that truck versus what was included in the RFQ and start trending downwards from there. Then that then becomes the baseline information for the next RFQ. And as that data is updated, you have that real-time data.

So connectivity and optimization both from the supply chain perspective in sourcing, but also from operations are what's going to move the needle and get us closer towards net zero.



Dawn Tiura:

Let's just talk a little bit about what's going on in the marketplace. So I have a question [from an attendee] that came in:

"You are stating that it's important to work with the supplier on supply chain reduction. How can you do it in an efficient way considering we have a big portfolio of suppliers and no standard calculation for products to compare the emissions of material A versus material B?"

John Muncey:

It's not easy, as I said already, but you have to start somewhere. So I think the only thing you can do is perhaps Pareto your own spend on your product classification. So if you have certain products which your organization deems as A-class products or A-class suppliers that drive the majority of your spend or those that have what you believe to be at least the biggest potential for carbon reduction, there is where I would focus my activity first because you can't do everything at once.

"And, those suppliers are always going to be getting the same questions from other customers of theirs as well. So collaboration is key. I don't think it's possible to solve this overnight. It will redefine relationships and it will cause people to work together – customers and suppliers."

Additional Resources:

- 3-minute read: Kickstart Your Sustainability Strategy in Sourcing
- Where does sustainability rank in sourcing decisions today? Find out in the Voices of Sourcing survey report
- 27-page guide: How to build the business case for Sourcing Optimization