PROFESSOR: All right, so let's get started. OK, good afternoon. Finally spring here, so which means you want to be out, not inside a room.

First, we're going to go over the strategy aspect. This will give us a chance to reflect the whole content we went through the whole term by maybe using the idea of setting up a strategy to try to connect the different sessions that kind of covered throughout. And also we're going to spend some time on the team project final deliverable.

I know there's some questions. You're going to-- you're meeting with us if you haven't already meet already. And I want to answer those so you are prepared to work on the final report. And then on Wednesday, we're going to hear firsthand from EMC on how they think about sustainability strategy, the sustainability group.

So the direct order [INAUDIBLE] the head people, they're going to come here. And you have a chance to validate and maybe get some of your questions answered on how a company actually makes these happen in a little bit larger scale.

STUDENT: If you guys want to go online too, EMC has one of the better sustainability [INAUDIBLE] reporting. G on their website and look around at what kind of information they're disclosing so you can look at that relative to what your company [INAUDIBLE]. Because I would say they're sort of the game and also maybe some questions to think about Katie [? Sindel ?] who will becoming on Wednesday.

PROFESSOR: Great, so that's [INAUDIBLE] little bit of the administrative aspect. So this paper-- who had read it before? Before we assigned it? So in the past-- in which context did you read it?

STUDENT: It was for a McKinsey thing I was on like a while back-- 2007.

PROFESSOR: OK, how about you? Where did you read it before?

STUDENT: Oh, sorry. I thought [INAUDIBLE] class

PROFESSOR: Oh, OK. This actually is a very good paper. [INAUDIBLE] this is actually the one I always go back to over time.

Because it has some fundamental insights that I think is worth revisiting. This is, even though it's not written for supply chain necessarily-- it's not written for environmental supply chain either. It's really more general CSR. But I think some of the key aspects of this paper are, I think, critical when you have to make this happen in practice.

This is very much connected to what we see and Alexis and I have been talking to people on, especially the pitfalls-- so how people address environmental aspects in their company and beyond. So why don't we start by who would like to kind of give me a summary of the premise, the basic premise, that Porter puts forward in this article? So we'll [INAUDIBLE]

STUDENT: Well, you've got to say that just the CSR is not enough and that people are going to take the CSR as like the end-all and trying to put it in these indexes without really knowing all of the true information. So by doing that, they're actually kind of going away from their true goal, which is improvement in these areas. So it's kind of looking at what are different ways that aside from this generally accepted [INAUDIBLE] that we can use to get companies to focus more on the social aspect, social responsibility.

PROFESSOR: OK, that's one. Would you like to add something to that?

STUDENT: It advocates for moving from corporate social responsibility towards corporate social integration and also that sometimes this companies spread their resources too thin [INAUDIBLE] NGO demands or kind of external pressures that aren't necessarily that integral to their supply chain. [INAUDIBLE] perhaps have more of an impact if they focus on one area in particular.

PROFESSOR: Let me see if I can get those three ideas here. One is the, I guess focus too much on the stakeholders. We'll talk a little bit more about that one. They integrate to the business I guess [INAUDIBLE] what you were saying as well.

So [INAUDIBLE] the index traps is one of the stakeholders. And this is not a trivial problem. And let me just relate back-- I'm not sure I can tell the full company name yet. But soon we will.

So we were talking about other major, major companies. And we were asking them, how do you start your green sustainability strategy? They said, we did this.

We went to all the indexes that were out there that were ranking companies. We looked exactly at why they were ranking as well. And then we started addressing, they give us like a guiding post we wanted to achieve, want to be number one in all those indexes. And then we look at what was the feedback they were providing us and we work at it.

And we're doing very well. They're ranked much better, of course, than before. But this is specifically addressed in this Porter article specifically advises against that.

So it advises against it in multiple dimensions. One dimension is, you know, these indexes are convoluted, right? But there's a fundamental, I guess, problem is that this doesn't go beyond what your company does. It's what somebody else cares about, not what your company cares about.

And the indexes, though they are the most visible part, that's not really is not going to be there to stay, I think, yeah? That's really the thing is it's not that it's bad to use them. It's just that if you think that's the ultimate goal, you will never be able to go the momentum beyond the CSR head. Whomever started this project, great.

They're going to be able to move this ahead. But once this person leaves or the company changes, to this is going to be gone. This could be five years. This could be seven years.

That's unknown, but that's, I think, one of the ultimate problems. So I want to list-- to tell that story. But focus too much on the stakeholder. And so you had a third idea but I forgot what it was. You forgot?

STUDENT: I forget too.

PROFESSOR: OK, good. That's good Anything else that you think were the key messages from this articles that are not those three?

STUDENT: I thought the way he wrote down four different types of CRS. So there was the license to operate, the [INAUDIBLE] obligation, sustainability, and [INAUDIBLE]

PROFESSOR: Yeah, I think taht's pretty good too. And the reason I think it's pretty good is because most of us, the first time we think through this, these are the four that come to mind of why a company do it. So one is a moral argument.

The other one was the license to operate argument. The other one that is maybe the one that we even within MIT we talk about more is the sustainability argument. And the third one is the reputation.

Who remembers why those four key claims are incomplete? It's not that they're wrong. It's that they were incomplete to capture the true motivation and meaning to drive and move change in an organization towards CSR or sustainability.

So let's talk about the moral argument. What was the main problem of using a moral view of the world to say, this is what we should do? This is the good thing for us to do. This is why our business you do it.

STUDENT: It wasn't very easily measurable.

PROFESSOR: Number one is measurement, which is always going to be a challenge, right? So, measurement. So what was the problem with the moral-- what was the problem with the measurement aspect? Not easily measurable, that's one thing. But what does he mean by that?

STUDENT: I think there are some things that are kind of like a [INAUDIBLE] a great area [INAUDIBLE] you do one thing, but you kind of destroy value in another area. And how do you actually get that to mesh?

PROFESSOR: Yes, so the measurement is that we all as individuals, we probably have our own moral values. And when we decide, should I take that extra piece of coke-- I paid for one drink, I want to top it off. You put, like, a little bit more than you paid for.

You do, like, a moral analysis, right? And you do it internally in the [INAUDIBLE], right? You say, well, you know, last time I had less. So maybe on average, I'm consuming the right amount of soda.

And I'm OK with going back to the line and getting soda even though I paid for one drink. It's like a moral choice, hm? And you do it at the individual level.

It's easy maybe to do those tradeoffs because they're not quantifiable. But if you go like a big company-- they use the example of Google-- you have two different moral choices, right? There's one-- openness. You want freedom.

But on the hand, you also want to give access to people to technology. So how do you balance those two? And when you cannot measure things, it all becomes a choice that is of leadership or some sort.

And you cannot translate that into business over time. That's one. The other thing is the moral compass changes-- changes from one place to the other, from one context to the other.

How can a company be run that way? It's not that morality is not part of the business decisions, but rather making that the main driving force for CSR does not allow you to do trade offs property. That's kind of what his main argument was-- a measurement aspect.

Lack of measurement is reality on moral decisions. But you cannot make the trade offs. And businesses are all about trade offs.

That was one of his main I'd say counter arguments. So that's morality. License to operate--

STUDENT: He said that they don't take-- so as you're trying to look good in the eyes of the community you operate in, you are [INAUDIBLE] to their requests by you're not taking it into account how you operate and what your competitive advantages are.

PROFESSOR: Yes, there's a dichotomy between your capabilities and what these community wants, right? So that's not taken into account. Also, this goes back-- he talks in there about different context as well, right? The context [INAUDIBLE].

Reputation-- this is the interesting one. Because actually, I spent a lot of time on trying to look for this information. What was the main argument against the reputation kind of bad approach for justifying CRS? Someone remembers?

STUDENT: A lot of times, it can just--

PROFESSOR: Very quickly.

STUDENT: --just a marketing campaign instead of like a true measure of what they're doing. Like, so they're just--

PROFESSOR: There's something more fundamental. It's true, it's a bit of marketing. But it's not proven.

See, there's not even-- we are not able to find real evidence that this actually works, that this branding creates business value, which is very surprising. But it's surprising because in the companies that are willing to do it very well, it's hard to differentiate how much is brand, how much is business. How do you make that argument?

And I think we tried several times, [? Alexis, ?] to find some good studies that show that being greener gives you better return over investment or business value. But actually, most of the studies have it reverse. They say, well, companies that are doing great, they tend to be greener, right, or more sustainable. But you can never find the other argument.

So doesn't mean that there's no value in it. It's just hard to distinguish that value from the normal operation of the business. So even if you try to go that path, you will not ever get a good sense of how good value they will give you, which goes back to why will you even choose to do it? When the times get tough and you have to cut budgets, how can justify doing this? I mean, he always thinks on how businesses should do this later. So a little bit of the value of marketing is unclear value of brand.

STUDENT: [INAUDIBLE] do it the opposite way that if you got attacked like in the case of Nestle and-- Nestle and Kit Kat situation when there was the Greenpeace attacks and we wanted to see the stop dip. And it maybe went down a few cents for one day and evened out. So unfortunately, even the reverse is not true.

PROFESSOR: The only example we found which actually is the scary example, the only one was Nike, probably, back in the labor market. That's the only example that has been documented that is closer correlated between the attacks that they had on labor and the actual stock value. But there were other factors going on in that time.

But that was enough to scare people across the world, which is good. I'm not saying this is a bad thing, but he argues that it's not enough. And then we go to sustainability. That-- what's the argument he uses for sustainability not being a good driving force?

STUDENT: [INAUDIBLE] There's not a lot of basis for it and it can also lead to misunderstanding the long term cost for short term gains.

PROFESSOR: So it's vague. So the definition is great, but what is the long term? I mean, how long is the long term?

How am I trading off the long term? Is this 10 years? Is this 100 years? Is this 50 years?

But I have to make decisions now and evaluate it now. And if I always have to make these trade offs long term and short term, the natural path is going to be postponed the long term.

And you could just postpone it, postpone it, postpone it.

And it's hard to make it, on a regular basis, a decision of the short term because it's so vague. Not know that it's the wrong framework, but it's too undefined. I think those more or less were the four arguments, roughly speaking, that were outlining in the wrong reasons to do stability. However, you talk to people, these are easier to explain.

Look at it any CEO's pitch. All of them, if someone is in operations, they talk about this license to operate-- like risk [INAUDIBLE] a little bit of risk. Risk management is very easy to understand. If I don't do the right thing, they're going to kick me out of China or out of Brazil.

That's a very, very natural way to do it. This also touches people. That's a good way to get a rallying cry for change.

This, of course, is just as the overall-- I guess is the overall trend that you in general by NGOs and media and actually ourselves here in academia. And reputation is another risk argument. And it's very well understood.

You can bring it into your company. But all of those four, he basically says those should not be the right ones. OK, so that's kind of the summary of the bad things that were happening. So he proposes a specific framework to try to think about this. So who would like to kind of give the idea of framework he proposes?

[INAUDIBLE] remembers? Doesn't this table? I think the table is in page 18.

It says how to prioritize social issues. And he talks about two types of CSR. Well, it's actually the other one-- it's page nine, probably, is a little bit better. Page nine, he talks about these generic social impacts, value chain social impacts, and social dimensions of competitive context.

As you can, I always say Porter is really good with words. Social dimensions of competitive context-- pretty good. But those three once basically are the way he proposes you should think about this.

So let me see-- who ventures to try to make sense of these three dimensions? Some one? Guesses?

Sorry, [? Gosa? ?] We have someone [INAUDIBLE] [? Gosa? ?] Two people?

No one is venturing yes, someone venture. Go ahead. Save the day.

STUDENT: [INAUDIBLE] answer.

PROFESSOR: The answer is no answer? [INAUDIBLE] So what he basically-- yeah, go ahead.

STUDENT: [INAUDIBLE] say that there are [INAUDIBLE] should be more integrated. So a typical response [INAUDIBLE] to be more responsible and to be [INAUDIBLE] in a way [INAUDIBLE] dimension and something that goes beyond just the response to the sentiment of society [INAUDIBLE] to bring [INAUDIBLE] further in a [INAUDIBLE] way to operate [INAUDIBLE] responsibility [INAUDIBLE].

And I will give an example. Like, for example, there's a positive [INAUDIBLE] for me. It means that they have this strategy of not only, for example, being a zero carbon [INAUDIBLE] but they want to go beyond it and [INAUDIBLE] than they virtually consume in their [INAUDIBLE] homes and so have a net positive impact in the end. So for me, [INAUDIBLE] like this.

PROFESSOR: So there we have-- on one end, we have the good citizenship, I guess. But what does he really mean here? Is it-- could you say that again? Maybe I missed. What is the position for a company in the good citizenship--

STUDENT: [INAUDIBLE]

PROFESSOR: It's a little bit of saying, do nothing, but do nothing responsibly. So basically, do nothing. You know, just take a look at stuff.

Just do the basics. Just stay there. Stay there.

Definitely have a code of conduct on how to do labor practices. But you don't have to make these something very important in your company. You just have to make sure people understand what expectations are, have the minimal compliance in some sense, and just do the right thing. It's like what we do every day.

Comply with the laws. Maybe you do not-- you're not looking actively to see how these laws are changing. You just do them. That's a bit on the left side. Why is this hard for companies to do?

STUDENT: Sorry.

PROFESSOR: Yes?

STUDENT: [INAUDIBLE] I was saying, being like a good citizen means, like, trying to avoid adverse effects from the business.

PROFESSOR: So just avoidance-- avoidance of effects on the business. So just make sure you don't end up in jail, eh? Which is-- this doesn't do for a good marketing campaign.

So we're going to avoid to be in jail on labor issues. We're going to avoid to be in jail on carbon footprint. I mean, that's why companies don't talk about this that way.

Because you have to. It's not that sexy. So that's on one spectrum.

So this is a little bit of say no. Say no thanks. So say no, I'm not going to try to solve this problem. I am aware of it. I recognize it and I'm going to try to do what the basic [INAUDIBLE] but I'm really not going to spend resources or time trying to do this, hm?

STUDENT: [INAUDIBLE] that is just avoiding the [INAUDIBLE] while doing [INAUDIBLE]. Because [INAUDIBLE] it's also [INAUDIBLE] to being to address consequences of [INAUDIBLE].

PROFESSOR: Yeah, so he talks about it in a little bit of the next stage. He says there's generic social impacts. And then he has these value chain social impacts. So there'll be some of those that will be closer to your business.

So there's a few of them that may be not as distant as others. But the ones that are a bit closer, then definitely I want to mitigate. So in a little bit, then, they move to say, no thanks, to mitigate risk. But you're right.

In some sense, you want to list them down and have some sort of conscious decision. And I think this is-- anyone that has studied strategy knows that strategy is not what you decide to do. It's what most of the time you make sure you are not going to do.

I'm not going to try to-- it's hard sometimes to say, I'm not going to do this or that. But someone, when you have a good strategy your head, you know-- this issue? I know it's important, but I'm not going to try to tackle it.

That's a little bit of what the [INAUDIBLE] is trying to put forward here is that you, even though it's hard to say no to one of these issues, you have to say no. Because you cannot solve them all. That's the one end.

And then on the other end, we have the more-- we call strategic CSR. This is what he calls responsiveness, I guess responsive CSR. That is on the framework of try to say no to try to mitigate risk. And on the other hand, you have the strategic CSR aspects of it.

Those are the ones that you have to say yes to. You say yes to in two different ways. One is the-- I think you were saying earlier-- is the one that tries to create new competitiveness dimensions as a company. I think they use Whole Foods as one example.

This is my competitiveness. Like, my [INAUDIBLE] organic food and I'm engaged with consumers. I'm engaged with the community and I do everything just to position myself as a completely different retailer where people can find certain goods, where people can actually not only get their products, but help the community. And they attract a certain kind of market.

And everything sustainability around Whole Foods is really tied to not only their values, but it's how they see themselves competing. Most people-- Whole Foods prides themselves that whenever there's a Whole Foods in a neighborhood, the real estate values increase. Because this is like a source of change, hm?

And they compete that way. And every green environmental dimension is tied to that competitiveness. But they also very much so charge more.

Now, most people cannot afford Whole Foods. So it's not the only value proposition that a retailer can have. [INAUDIBLE] other that are different-- scales and just other things we will talk about later.

But that's the example of a strategic CSR. And there's another-- he actually talks about another example there. And we saw this-- we were talking with Siemens.

And I think you can help me here with some of the Siemens vision. So Siemens, they do all kinds of electrical equipment for big power plants. So for them, green energy is the business of the future. So they decided, we're going to sell all kinds of hydro wind energy.

And they put lots of effort into trying to sell this to other companies. But the only way you can sell this outside is if you use it inside. If you don't have good energy practices in your company, you cannot sell the product outside. So for them, it became quickly a transformation of the culture and trying to do a much better job with their own suppliers in energy management.

Because that's the only way you can justify that future positioning of selling wind energy and selling the future energy solutions for the world. You have to sell new products and then you have to work on your supply chain to be as energy efficient as the products yo want to sell. So they kind of transformed their CSR and their supply chain environmental practices, focusing on energy reduction and energy savings, because this was fully aligned to how they wanted to compute.

GE is also mentioned, [INAUDIBLE] imagination projects. You hear about GE. Same thing-- they see it as the future.

People are buying these products so my company also has to be very good at mentioning energy use and saving energy throughout my manufacturing plants and my suppliers and my suppliers' suppliers. I need to be consistent because this helps my positioning of my brand. And also, these suppliers are going to be my customers. If I sell energy solutions and my supplier needs to improve their energy, they'll buy my products.

So they had a bit of a virtue circle, I guess. Toyota is the same thing. Toyota, they mentioned here in the case in the article. Now, there is-- the other group they call here is called transform value chain activities to benefit society while reinforcing a strategy. That's a mouthful. What does it mean?

STUDENT: I think-- well, it gives the example of Nestle. And he's just talking about fully integrating whatever your CSR priorities are into how you do business every day. And that's what Nestle does. They work with small farmers. And so their impact is fully integrated into their company strategy.

PROFESSOR: So it's just, so what you do, do it well. And do it well sustainably. So Nestle is a great example.

UPS-- who's working with UPS and FedEx in their-- so UPS, another great example. So UPS, they also have what-- the business of packaging on the distance is a very thin margin business. Every single decision you make that saves-- especially at the scale of Fedex or UPS or any of these packaging companies, any gallon of fuel you save in one route multiplied by the number of routes you run by every day multiplied by the number of routes per year, it's millions and millions of dollars of savings. And if you do it well, your business runs better. And what they have embraced sustainability is to connect it to that particular thing.

We are going to save fuel to the nth degree in every single operation we do. And this connects with what they do very well. That is logistics and transportation.

So that's kind of about another example of look at what you do and what you do that matters to you. You're going to do it as sustainably or whatever the dimension as possible. You're going to leverage what you're good at to try to expand and make it sustainable in some way or another.

And transform that function into a competitive advantage. That's kind the idea that he has. There's a problem with all of this, though. We'll talk about the problem later.

But that's the strategic CSR. It's strategic because you see a new market coming or strategic because you have core competence in the way you run your business. And because of that, you should spend time there and do it better.

I think that that's the basics, the way I like to see his article. And if you ever go to a company or-- this is a good one to keep around. [INAUDIBLE] to go back to it and read it multiple times over your lifetime. So before you lose your access to the MIT libraries, have it print a copy.

Or you have to pay-- how much is it? $6.99? Well, you'll have the budgets in the future.

But let's look a little more about what-- anything else that I have not covered on the basic messages of this article that someone would like to highlight that maybe he mentions at the end? No? All right.

STUDENT: I just wanted to make a comment.

PROFESSOR: Yeah

STUDENT: I'm taking a marketing class, a branding class right now. And the main takeaway I got from here that's synonymous with what we're learning in our branding class is DNA. What we see in a lot of different case studies we've read is that when a company doesn't incorporate the brand new message and the attributes of-- the key attributes of the company into their DNA, then they fall short and they're less competitive against other people who do it well.

And so that's kind of what I see. He's actually saying that if you're going to position yourself and integrate yourself as this environmental conscious company, make sure you've intertwining within the DNA of your company and don't just do it to address some hot issue that's in the news at this point in time or that it sounds favorable because it's the flavor of the month. Make sure that you integrate it in everything that you do.

And then that will have a huge benefit to your company in the short term and long term.

PROFESSOR: Yeah, so there's also the DNA which when you hear people explaining it is kind of sounds funny. But it's really the crux. Now, what does he mean to make it happen? So this is very strategic level. We're going to talk a little bit about it.

OK, great. Now put it into my DNA, how to put in my DNA. But let's look at a few things that are not here explicitly mentioned on the list that I believe are important. So even though he doesn't talk about this in this paper specifically, he really doesn't talk much about the life cycle view of products and services. Not that-- because it's [INAUDIBLE] CSR in general.

So I think that's been much more developed since this was published. But this idea that you really need to think of the life cycle of a product or a service to try to inform this process I guess is a specific, I guess, tool or at least view of the world that helps inform this process. Because how do you inform which areas you can prioritize or not is not very well determined here.

That's one thing. And as a consequence of that, if you remember from life cycle and all the things we've heard, is that most of the emissions of any single company, actually-- it doesn't matter which company you look at-- are not within your company, right? They're always in your suppliers or your customers, which creates a more importance to make those external connections as part of your strategy.

I think he does mention it here in some places. But I think he was not as clear because of the scope of this particular paper. It was too CSR generic.

When talking about environmental, even social aspects, most of the impacts are outside your company just because of the way the companies are structure. When you have a life cycle view, you have to put more emphasis in those external connections, more than maybe he tries to portray in this particular article, which is why we talk about supply chain, let's say, as an enabler of this strategy. But the priorities of the high level need to be connected to the same principles.

But this lack of emphasis on the life cycle view on your supply chain I think is the one thing that I believe is a little bit lacking. But let's look at page five and take a look at that diagram of page five. I think that diagram of page five looks awfully familiar or at least should look awfully familiar except that ours is prettier.

Actually, his is prettier. So you have all the functions of the firm, the same thing we had on our day one on the class. And he has, like this inbound logistics on the left side as the function to bring things in. And he has as well some ideas that you have [INAUDIBLE] looking inside out aspect of it-- transportation, emissions, et cetera, et cetera.

Then you have operations. You have emissions and waste. These are kind of the things that you think you should look for inside your company for inspiration of where to take action.

You have [INAUDIBLE] logistics. He has packaging use and disposal. Then you have marketing and sales.

This more advertising. And information is more about communication. And you have the after sale services and you have your disposal of obsolete products, handling of consumables, some of the dimensions to look at. Then you have the procurement function that, in the view of a company and the strategy specifically the way Porter likes to think about value chains, he sees procurement as a about supporting function for all these functions.

And he lists on the right side-- he talks about use of particular inputs and have this bullet of utilization of natural resources. So all these kind of bullets here in this diagram are the area you should look for-- things to include in your strategy, I guess, and prioritize one over the other. So you could choose and work more on reducing of packaging.

That's what you could do. All these are levers that you can somehow engage that are aligned with what you do as a company. And if you go through this list, you will see very quickly that there's some things that you see all over the place happening that make sense to companies.

So let's start with one-- waste. waste-- why is waste always to work in every single company? Waste is money that you are throwing to the garbage.

So whenever you can go to extract value of that waste-- always going to work. So this is kind of a natural connection with any environmental initiative you find in the planet. Doesn't matter which one it is.

Even if your company does like zero interest in the environment, waste always connects with the environment-- always. So that's always a natural-- you see that highlighted in your reports of your companies-- you know, zero waste plants, zero waste to landfill.

Waste is always one of those areas. And that's just because that connects to operations very directly. That also is usually not measured the first time around.

The company has not measured it. And you start measuring and people can relate to dimensions because they work with materials every single day. And you can put targets that are very aggressive.

And you can also put a vision that everyone understands-- that is, zero waste. So if you see of any company that is doing tangentially trying to get this started, you see some sort of waste initiative. Again, why? Because any plant manager, any distribution center manager, anyone that manages anything that is physical waste, you can also relate it to.

That's always a good way for companies to start. The problem is it's not connected to the whole strategy, but that's always another thing you find that I think is very easy to measure, which gives me to the other one that is next to it on outbound packaging. Packaging is another way of waste.

It's waste that happens once you ship your products. It's visible to your customers. That's an easy way to start.

Transportation impacts also on the bottom line. I'm looking at those. Those our people see less miles traveled. That's less cost.

Less fuel consumption-- that's less fuel. That's also less cost. Bury, resell your [INAUDIBLE] that's less distance, which is less cost and also emission.

So you see that those ones over there are the ones that connect easily with your business but not necessarily connect easily with your strategy. That's why companies have that always because people grasp it. But that doesn't mean according to the whole framework, those are the issues to put emphasis on. The fact that you can do them doesn't mean you have to. Go ahead.

STUDENT: Here. I have a question.

PROFESSOR: Yes.

STUDENT: It's how to determine the boundaries of your responsibility as a company. Because especially when you manage a supply chain, there are a lot of levels of vendors. There are a lot of suppliers that at the end, you don't know who's supplying you and you don't know if they are compliant with those, whether it's [INAUDIBLE] for the company. So how to determine those boundaries of the responsibility of the company.

PROFESSOR: So let's talk about that. Someone has a thought. How do you determine your boundaries?

STUDENT: Well, we're doing auto companies and Ford is taking care of this. So they draw the boundary at their tier one suppliers. And they say, we want all of our tier one suppliers to comply with the ISO 14001 standards for shipping emissions.

And then they've sort of thrown-- not really thrown out the level two and level three, but they're doing studies with the level three and saying, we're seeing if we can figure out what our level three it suppliers are doing. But it's not really the focus. The focus is the tier one. They provide training to the tier one on their environmental management system. So they're actively involved in the tier one and sort of peripherally involved in anyone beyond that.

PROFESSOR: So let's [? pick a little ?] on Ford and the auto companies. So based on what you have read on Ford, what do you think is their strategic imperative for sustainability and environment?

STUDENT: Well, they hit it as far as marketing for their vehicles. And then besides that-- so it seems like they're getting heavily driven by the Carbon Disclosure Project. Because pretty much everything that is on their sustainability website is almost a copy and paste from what they put into the Carbon Disclosure Project.

So I think they've been getting some external pressures recently. And as far as their corporate strategy goes with stuff that's not being marketed to the customer, they're sort of convincing investors that they're starting to do the right thing and being a good corporate citizen and starting to incorporate environmental stuff in their strategic CSR. But it's hard to determine. It's kind of hard to figure them out because they really only give you the politicians' line of, we're doing this because it's good and we're looking, like, all the way down to conflict minerals for our sources.

PROFESSOR: So from your point of view, then, should they spend more time-- I'll get back to you, to the question. But should they spend more time looking at their suppliers or not? I mean, I know you're not the Ford CEO, but--

STUDENT: I mean, for a company that's as large as them, I think it would be extremely difficult and very cost intensive for them because they have tens of thousands of suppliers. And trying to track down every single one, I think, would be insane.

But they have a few level ones and they are directly involved with those. And then the amount of suppliers exponentially grows when you leave tier one. Like, as soon as you get to tier two, it goes up by order of magnitude and then another order of magnitude after that. And they think they have 10 tiers of suppliers. So to track down everyone down to level 10 I think is impossible.

PROFESSOR: So I'll ask [INAUDIBLE] of questions if you remember [INAUDIBLE]. What was the life cycle impact of a car in use versus-- do yo remember? It was like 60% or 70%.

70% of the emissions of the life cycle of a car happens during use, which means the number one issue of your car company should be fuel use. Design better vehicles-- that should be all your energy.

The rest is important. Those 30% is important but is not critical to achieving, let's say, significant impact over time. So this is one way to answer your question and this is two ways.

One is where these companies are trying to put most of their effort is in designing products that are more efficient. That's where they should. I'm not saying they're doing.

That's what they should be. Because you can achieve both things. You could achieve a better sales, better market, but also that's where your impacts are. I mean, if you really care about the environment as Ford, you should pretty much say, you know what?

My number one priority in the world is to make the most efficient cars. We [? say you ?] sometimes do [INAUDIBLE] I think they have this-- you showed it last time. They have all this zero efficiency car or energy, yep-- zero emissions car.

And that's where they are aiming for. And this immediately answers how deep you should work in your supply chain. Because if that's not your number one place, you should definitely do the right thing.

What is the minimum thing you should do? You should mitigate risk in your supply chain, kind of comply on the things that people are asking. And that's why you probably will see that they will go straight to the minimum number of questions that the CDP report asks them to do.

Because you want to do the right thing. I mean, sure-- you're going to save money. It's good for you as a company. It resonates with your brand.

You cannot sell a brand that is zero emissions if in your whole factory you have a bunch of waste. And also this is related to cost reductions maybe. So all these things kind of immediately tells you my focus is the product that's where the impacts are.

Maybe what I should focus in my supply chain are things that have direct impact, put my resources there-- some resources, and but try to cover all the network of OEMs that supply my car. So this is kind of a-- I'm kind of backtracking on the question, but the answer is not tied to how big you should go. It's where your impacts are or whatever is the main purpose you do.

If your impacts are in the use phase, then maybe you should not spend that much time. I mean, do not ignore your suppliers. Make them better. But it's not where you should try to go all the way down

STUDENT: [INAUDIBLE] They might have design principles that they can help make the car use less gas or less-- be lighter and drive farther. But in the case of, like, the Booth's shampoo, Booth's is a pharmacy chain in Europe and they found out when they looked through life cycles [INAUDIBLE] shampoo that the largest impact is in the use.

And so they decided they want to do consumer campaigns about taking shorter showers, using less heat, and obviously changing consumer behavior around your shower. It's not a very easy to change. So I think they thus since dropped that kind of campaign, realizing that they can only affect their own internal operations and some of their suppliers as opposed to the downstream impacts.

PROFESSOR: So yeah. So there was a couple comments and then I'll keep talking.

STUDENT: --going to say is a point of comparison. I'm [INAUDIBLE] BMW and most of the marketing material on their own website and others [INAUDIBLE] BMW, it's all about the cars [INAUDIBLE] or the technology that they're developing to make their cars more efficient. A lot of that's driven by just German engineering but also a lot of legislation that is taking effect in Europe.

But another thing that's interesting is they have an electric car sharing program that they started up in Europe and now in the US. And so they're really drilling it on the use phase, which is where they have the most impact. So they're doing a pretty good job.

PROFESSOR: And also I think I do not want to underestimate your insight. That is, these supply chains are massive, you know? The car supply chain is just incredibly complex.

They have no idea really where these things are. And they have really very little resources to try to spend time on going after that information. So they are hoping that by putting some pressure in tier one, this will propagate down somehow.

And I think they-- the list of priorities they're doing I think is the right. Tier one is probably how far they should go. Now, let's look at another company. Who else is--

STUDENT: [INAUDIBLE] so I know in many industries this is not even close, but what if the place where you can help where there's more of an impact, you're already very close to being as efficient as possible? So I mean, I'm assuming that [INAUDIBLE] this is not the case. But in super efficient, putting more resources into that type of research would yield much less results than, for example, trying to work with your supply chain. So how do you even determine where you're reaching a limit of what your levels are?

STUDENT: Well, my take on it would be most companies have an area that they can address. And so they might say their most controlled might be their logistics system or their transportation network. And they can say they've already optimized that.

There's nothing else they can do. But there's usually-- there's no company that can't go to the next level hotspot that they can start addressing. Some companies we've talked to have done what they call a materiality assessment where they look at things that are material to the business and then they assess the impacts on each of those given their products or their operations or their employee engagement.

And they pick all these spots and they can kind of-- they can kind of rank how they address each of those, trying to address the hotspots of their products or their own internal operations and then maybe [INAUDIBLE] down that materiality assessment on how they address those impacts. I don't know if any-- has anyone seen a a materiality assessment as they come through? Nothing out there? OK, interesting.

PROFESSOR: So I want to hear from another of the case studies you're working on in terms of how did you go to into your supply chain or have you observed in the companies you're working with. Roberto?

STUDENT: I was working because we're doing Chevron and Exxon/Mobile.

PROFESSOR: So your splicing is kind of short.

STUDENT: Yeah. And it's pretty obscure. So one area we can look at is shipping, ocean shipping, of crude oil from one location to another. Which, of course, there's a lot of impact on that. But aside from that, everything else is just within the plan.

STUDENT: I'm doing Toyota alongside of BMW [INAUDIBLE]. And they have the halo effect of their previous five billion, how many cars have they sold. Yet they get hammered with-- the CDP scores are pretty low. And I think that actually having a car that is so successful, an image, reputation that is good in that market actually keeps them from doing better. And as a result, they fall behind companies that have cars that typically are a lot more gas guzzling. So I think you can have an issue where a reputation gain somewhere actually prevents you from going further in other areas.

PROFESSOR: I want to hear from somebody else. Which-- yep.

STUDENT: We're Nestle and Hershey's. I presented this a little while ago, but Nestle has a couple of supplier tiers [INAUDIBLE] to [INAUDIBLE] and today require their tier one-- like, their direct suppliers-- to comply with their suppliers code-- just in and of itself a little vague. But then the vast majority of their suppliers, like, for their commodities, they really have no control or traceability over where those products are coming from.

PROFESSOR: So let's talk about-- that's a great example and I'm glad you brought up food. And let's talk about food in many ways. So I just-- so I just-- full disclosure. So Starbucks is a partner of our center, which a partner means they give us money for research.

But this is part of the work we've done before going to research with them. But I'll talk about Starbucks. The same with Unilever, same with Nestle. And they have actually the imperative of trying to go as deep as possible in their supply chain as they can.

And let me explain a little bit why. So let's talk about Starbucks, right? So Starbucks coffee-- this is supply chain that is very much goes to fragmented on sourcing side-- lots of small farmers. Similar like Palm Oil, similar-- many of those are like this.

Bananas are not like this. But there's a few big manufacturers. [INAUDIBLE] this one is small parcel manufacturers. And Starbucks, a little bit on the way they see their business is that we are providing our customers with like a third home and third place. They have some sort of wording along those lines.

And coffee for us is an experience, an experience that we want to transmit to our customers. And that experience cannot be complete unless we can tell our customers that our product is the best product ever, right? And the best product ever, from their point of view, has multiple dimensions. It's, of course, quality, right, the product, number one.

Safety-- you don't want to get ill. And you have a place that is nice where you can enjoy your coffee and have friends and so forth. But the other dimension they are completely conscious about is we need to make sure that you are paying premium for this experience and we want to make sure that we make our suppliers as prosperous as possible for two reasons.

One, because it's the image we sell, but the other one is that if we do not make them prosperous, we're not going to have the best quality coffee ever. Because if you take corners and you don't wash your beans well and you do not plan the best coffee in the world and you move to another plantation and you-- then you lose the best coffee in the company. I mean, it's somehow embedded to you.

Unilever has a similar view of the world is-- we sell fish sticks. [INAUDIBLE] it's no fish, no fish sticks. I sell fish sticks for you to eat. But if there's no fish, there's no fish sticks. So I have to care about how people catch the fish-- maybe not in the short term, but in the long term. So this immediately makes you be much more aware on not only the whole seller that you buy your products from, but rather try to go as deep as possible.

So in their cases, both Starbucks, Unilever, Nestle are trying to do the best we can on some of their key commodities to try to go as deep as possible. Now, Starbucks, because their ethos was a little bit more on the sustainability aspect, on the shared value aspect of your supply chains from the very beginning, they actually have much better progress on that area. So they instituted the CAFE Practices.

STUDENT: [INAUDIBLE] CAFE Practices where they have actually a supply chain certification group that goes into the farmers and actually certifies that the farmers are trying to use less pesticides if they're organic and using less water, making sure they're paid above minimum wage. And then Starbucks Social has a lot of different training programs. Because one of their greatest problems is farming is becoming less of a desirable occupation around the world.

That's not just a coffee problem but a chocolate problem and a tea problem. And so kind of ensuring that the farmers have good quality of life so that they continued to grow coffee and they have a sustainable source of the coffee that they're sourcing. So they have auditors that go around the world and they work with farmers when they have a gap that they're able to improve their practices in that area.

So they started up the program, I forget, in 2008. And they said they're going to get to 95% 25 2015. And so they're about 93% of the way that all these farmers are certified around the world. They're a third party auditor. So it's not Starbucks going out to these farms in Costa Rica and certifying them. So then you have third party auditors that they then report to Starbucks who kind of has the overall deal with them.

PROFESSOR: So they have a database with all their suppliers that [? our ?] CAFE already did, right? This database is pubic. Actually, in theory, you can go into the CAFE Practices website.

STUDENT: You can request it.

PROFESSOR: You can request it. It's not public published but it's public of view requested. They may say no, but you can ask again. And maybe eventually, they give you some information.

So they have gone deep, deep, deep in your supply chain-- as deep as they can do with the resources they have. And the resources Alexi was outlining is we set up the practices. We ask our buyers of coffee that unless you are willing to pay a little bit more for coffee that is CAFE certified so you have the incentive and you're going to eventually make this happen.

We do not force our suppliers to sell to us. They can sell to other people. So the CAFE practices are not only for Starbucks suppliers.

Same with Unilever and the Palm Oil. I guess you went through all the Palm Oil discussions so I will not repeat it. But Unilever is now trying to go directly to Palm Oil. Straight-- no commodity pricing. Let's avoid that, let's say, that lack of transparency. Because it's so important to us that we'd rather pay a little bit more because this is what We need to care about. So it's a little bit of how deep. In this case, it went really deep.

Because this is-- food supply chains, especially agricultural ones, are very critical for them as a business. So this would be a sense of how deep you go is a function of where you are impacts are and where your interests are and your risks are as well as a company. Anything else on that question?

That's a very important one. Any other of your companies that you-- is either different? No?

All right, good. So let me then get you back to a couple of slides that we set up at the beginning. And I will try to give you-- this was the first slide that when we started the course, we kind of went through it. So [INAUDIBLE] All right, so these were the way we structured the course.

Let me kind of try to explain why we did that work now that you have a better sense of what the strategy is. The strategy is actually to say no to many of the things that we have here. That's what a company should do.

One is to understand that just because of the nature of how businesses have been developed, you have to somehow take this life cycle view of your product, which means you have to not only think about the things you control and buy from, and you have to somehow make sure you keep in your radar how you use and recover your products.

Let me give you an interesting example today which goes back to how companies do their businesses. Do know what the espresso-- the company that does these automated things? So we have a friend of mine from the Netherlands-- and also I have an espresso machine.

He has an espresso machine as well. Pretty crazy-- we're talking about this. Oh, [INAUDIBLE] great. So are you part of their recycling program?

Espresso has a recycling program? Yeah, they have one. It's very important to Europe. When you get all your packages, you get like a bag. And you put your used bags and they recycle it for you.

Because these instant-- the packages of coffee that you process your machine are designed to be high quality. But they cannot be processed in the US for recycling. So they're waste and they're lots of waste and in Europe either. So basically, they have the whole program for espresso customers is highly advertised in Europe on the closed loop.

And here in the US, is there somewhere in the website that is not the core thing? And now they have-- just to tell you that even this view, you have to have a market that cares, right? So even if you think of the best process in the US, people maybe don't care about recycling.

So it's too expensive. We know how hard it is to set up those systems. So in Europe, that's much more developed. Anyway, so the first business to understand that you have to decide in this system is not easy. And we know that's not easy.

And you're required to either partner with a third party and you have the scale like we're talking in [INAUDIBLE] and the connection with the customer. You may be able to do this by yourself, but most of the time, you'll probably have to do, leverage a separate supply chain may be expensive at the beginning. But over time, it will get better.

But if you need to own this, this is going to be a little bit hard. So that's understanding a little bit of the challenges of these because this is very less studied in general in most companies-- was one of our goals. Started using the life cycle view of the world.

Then we really went into understanding how to make the measurements of, at least in some degree, how a measurement is done on the use of resources, the life cycle assessment. Why? Because measurement is the only way you can eventually make decisions at some point.

Doesn't matter how committed you are. At some point, you have to make a trade off. Should I do this or do that? I love the talk from Seventh Generation. I thought it was great.

Should you should use these bags that are worse off for the environment, or should we use our laundry detergent containers? That's a really concrete decision you do every single day. If you have no measurement, you cannot make the decision well.

They know that what they're doing is worse for the environment on an individual unit basis. But they also know that if they don't offer that, they will not be in the shelf. So as a whole, it's better to be bad on one product but better as a business.

And that decision can only be made if you have the information. Otherwise, you will never be able to make the decisions bad or good or conscious or not. That's why life cycle assessment, understanding life cycle analysis, and try to bring it as close as possible to product design is very important. That's what we including in this class.

Even though it's a supply chain class and this is a whole course on life cycle assessment, you need to understand that to be able to make real product decisions and real supply chain decisions, you have to somehow get into grabbing this information. This is what Nike did very well. After the whole process and labor and they embraced sustainability, they created a Nike considered index for their products and they did life cycle analysis of materials.

And they tried to inform their decisions as best as possible-- measurements so people can make the decisions of the moment of making that trade off. That was the idea of getting carbon life cycles thinking into the course. And the other [? rest ?] of the course was a little bit more focused on the other stakeholders that push you one way or the other to make the moral case, make the reputational case through a tax or partnership, right? These are the stakeholders that actually push you a lot towards this thinking.

This is stakeholders. You need to understand them. You need to somehow understand them and engage them but engage them not to agree with them on those cases, but to try to use them to inform eventually how to make those products.

This is why you need to really understand where policy is going. We saw the policy talk. Policy unfortunately is going nowhere. This is not going to be a policy discussion.

We know that policy is very convoluted. It's going to be lagging always. So as a company, if you really want to be strategic, you need to be more about either understanding where the interests are of your customers, where you can find competitive advantage, where you can tie that to cost savings, something like that.

But if you post, it's going to move very, very slowly. You can drive policy a little bit further ahead, but you saw the process of Mercury. And that's the easy one.

The CO2 greenhouse gas policy discussion is stalled forever and it will take many, many years. That's not a reason not to do anything about it, but you have to be very much aware that really effective policymaking is not in the foreseeable future unless there's some big disaster. If something terrible happens and lots of people die for something that can be connected with climate change, trust me. Next day, you have regulation.

But right now, the way things are moving, you saw the mercury processes. How many [INAUDIBLE] in total? 12? 14?

From the science consensus to getting all the things-- and you saw that all this is just really compromises. It's never going to give you to taking specific action. So you have to be very aware of that. And you saw the view of the NGOs which, of course, they are really committed usually to the moral argument.

That's their main driving force. They believe this is the right thing. They are the conscience of humanity and they want to move companies to do the moral thing.

And companies need to push all the time. I want to do the moral thing, but that's not where my strengths are. The best way is to try to do something in between. OK, good, so we've [INAUDIBLE] us to how to make this happen in a company.

So this is the talk I give to executives when they ask me, oh, so give me a process. People like, like, five step process or three checklist or something. But ultimately, it's something like this, right?

It's what we were talking earlier. It's that you have to understand the pressures of your business which we have talked to ad nauseam. And you have to make this decision that is, say no to some things and don't go them. Somehow, do not do them.

And not do them means do the minimum, do the right thing, or do the things [? where ?] to mitigate your risk and pick a few that you really want to do well. And that's a kind of-- and to do that property, you have to measure somehow. And once you do that measurement, then you really set goals and targets, which these set goals and targets is the one thing that I unfortunately cannot teach you.

Because I don't know how to do it. I wish I could tell you what's the best goal to do. 10% reduction of waste per years?

Zero waste by 2020? I mean, what is the best goal? So Alexis, you have a better advice to our esteemed students?

STUDENT: Talking it through companies, you know. They assess where they're at currently, what quantities-- if you're going to look at waste management, they look at how they-- a lot of companies will do a pilot and see how they can do it within the first year and look at what the competitors are proposing and other people in the industry and if they're the first of the type.

The one thing that I've read in a lot of reports is that, you know, we're putting high goals out here. We may not hit them, so better go high. Then it's almost worse if you put low goals because then you'll get critiqued for not shooting high enough. So you're never really going to win, but they go through a large assessment of what they think they can do internally and looking at competitors and kind of gauging it that way.

STUDENT: What are thoughts about levels of today or levels of--

PROFESSOR: Go ahead. Yeah, have some thoughts, but you have some thoughts as well?

STUDENT: I'm just wondering if that's a good way to start.

PROFESSOR: Yeah, so that's a good way to start. So let me just position this. If you look at any company, they have these vision goals, right? Which just put clear to the company where are your priorities, right?

We're going to have a zero emissions car by 2050, right? Maybe 2049, maybe 2030, whatever the number is. So you definitely need to have this idea of that vision target that tends to be super aggressive.

Why? Because that just tells you where your priority is. That's a way to say, this matters to me. This is why I want to do it.

And that's what you see in all the CSR reports. That's the number one. The next one they do is like Alexis said.

And this goes back to the process of setting goals and targets in any organization. Who here has experience in a company doing financial targets for sales? Who has done it?

Who has been part of a process for sales? How is that done? How does it happen when you, like a company-- I'm the CEO of a company and I need to go next quarter or next year for my guidance for Wall Street. And I need to set up goals and targets. How do I do that?

STUDENT: Well, we would just have like an annual operating plan process where basically they would bring it all the representatives from all the sales divisions and they would come in and say here's our major-- they could come in one by one, like, all the adds, and say, here are the customers that fall under us. Here's what we think. [INAUDIBLE] we forecast the business that we're going to do based on XYZ reasons.

So therefore, [INAUDIBLE] number. And they would roll all that up into one. And operation [INAUDIBLE]

PROFESSOR: So they get a meeting and everyone comes with a number. And that guys went back to his team beforehand and said, guys, I have a meeting tomorrow with the CEO. How much are we going to sell?

And the guy asked the other guy how much I'm going to sell. Eventually, someone that really knows what happens says, oh yeah, have 20 customers. I predict my 20% growth.

I see these opportunities. And they roll it up and then they could make some guesses, right? And they just-- I rounded up the number [INAUDIBLE] good.

The CEO says it doesn't look good enough. You have to do better than this, right? And the CEO says 10% more. You say, I don't know.

Yes, you do it and then you do it. And next year, they do it, right? And that's-- and that's the way it happens.

And I'm kind of a little bit excited [INAUDIBLE]. But this is roughly what happens. I mean, you can make all the nice frameworks you want.

You [INAUDIBLE] to the target. But this explains what happens. Someone cares about this number.

They force you to think about what's the best way to do it. And you go back to your team and try to find some sort of middle ground between what you think is doable, what you really think you can do, and your manager and the CEO tries to stretch you beyond that limit. So you do not just set a number that makes no sense.

Because everyone's going to put a number that I know I'm going to meet. And the CEO knows this. And because of that, he says, I want double of that.

And you play the game of tension. And you miss one year. You don't get the bonus and make sure you do a better job.

That process is exactly the same process you should go for environment targets, right? It's exactly the same process. I mentioned at the end of this long rant one important thing.

Your bonus is set to this, right? So that means money. But some sort of incentive is set to this process.

If there's no incentive or penalty, nothing gets done. So you can get, in the short term, some things. But in other things, you need to provide specific targets.

So this is where, again, we go back to-- you want to do carbon footprint emissions? You have to tie it to something that the person can do. For example, if you want to reduce 20% of your emissions or go to the same level of emissions as 2020 based on the 2001 baseline, then you have to connect those emissions to something you can take action on-- energy use. Right.

STUDENT: Don't you run the risk, though, of kind of, I don't know, questioning the integrity of the process? Because then you could have engineering in the way you're reporting or measuring. And if you tie some sort of financial incentive to the goals, then there is the potential to have a lot of effort to have good results on paper but maybe not necessarily to be driving more [? real results. ?]

STUDENT: PROFESSOR: So that's talk about-- that's a really good point. So the companies that are successful at this, they-- somehow the measurement systems need to be as reliable as possible to avoid that problem. Because if yo don't have a good way to measure the progress, then you can fudge the numbers. So you have to connect it back to whatever metric of your business you can get actual reliable information on.

And I think that's why the leading companies, I think that's why they do better is that, sure, we want to do carbon footprint and we do with [INAUDIBLE] this big [INAUDIBLE] protocol CDP report. But somehow as they go down, they tie this to number of miles driven on my car, number of kilowatt hours of my-- so that process of kind of somehow connecting these goals and measurement systems, that I think is the hard part that companies take a long time to develop. Because information you need to measure you may not be capturing.

So you have to build, let's say, that knowledge internally and then eventually try it. But I agree. If you do have some sort of connection to the real business operations, you cannot really set credible targets and tie it to money. And I'll give you another example. I know you have a question before we move to--

STUDENT: [INAUDIBLE] measurement like in the Palm Oil case and also with Chevron to do third party verifications of things just to verify before they award incentives or peform the bonuses or whatever.

PROFESSOR: So not all the-- so not all the performance gives bonuses, but they do have an impact on your evaluation. So let's suppose you don't have to try as a bonus something, but you have to meet certain criteria. And if you don't meet them, you know there's a risk that your job is not going to be there for you in two, three, four years. No one expects so. I mean, that was your question-- was that your question?

STUDENT: I'm just saying--

PROFESSOR: As a comment.

STUDENT: Yeah, one way to ensure that the system isn't being exploited is that companies--

PROFESSOR: Yeah, third party.

STUDENT: --use third part--

PROFESSOR: Yeah, absolutely. So third party verification is one way to try to achieve that balance and make sure you have a third-- especially as you go deeper in your supply chain. But I do want to emphasize that to be serious-- I"m not saying that these companies are not serious, but to be able to fully embed it to your business capabilities as a company, somehow you need to set goals and targets that are tied to ways that are credible measures.

You cannot just be do your- everyone does their estimation of CO_2, right? It needs to be, I have a CO_2 calculator that is somewhere in my system that I can click a button and know how things are going. If I cannot do that, then this is your CSR report that happens at the end of the year. Let me just differentiate what I just said.

So everyone can come after the fact that I can do an estimation of CO_2, hire MIT, hire Stanford, and I can go in and spend six months, right, and do-- this how much CO_2 you save. Great, but that doesn't mean that the company is doing anything right. If you're a manager, you have to get a report every semester, every quarter, and this is how we're doing so you can take action.

And the only way you can do that is to connect that measurement of environmental performance to something that you are collecting in your day to day operation, whatever it is-- energy use, again, number of tons of miles you sold to waste disposal. Something, right? And someone has to figure out how that number connects with the environmental goal you're trying to achieve and set that target to that metric.

This process is what is difficult. And that's why the measurement is kind of the tricky part because companies are not used to measure. And if you do not do that, the only thing you have is a great CSR reporting machine.

You are not really changing your business or your suppliers' businesses. You have a great CSR reporting, which is needed. It's a precondition.

Unless you know how to do it yourself, you cannot put it in your metric. You have to trust it. You have to develop the expertise.

You have to have the right people. You have the SAP systems to be rolled out whatever you use it. Someone needs to do it.

If you don't have it, you cannot do it. And this goes back to suppliers. And we'll talk about suppliers in a second. But is there any questions or comments about what I said? I want to make sure this is clear.

STUDENT: A lot of the incentive is based on stock price. Companies don't really give out big checks. They give out 20 shares or whatever. And there's a conflict between getting that share price to increase and doing the right thing. For companies that have target incentives that are stock driven, do you have any suggestions for setting goals and targets?

PROFESSOR: That's where-- the only thing I like there is the Dow Jones sustainable index even though I hate that index. It's a great index because at least people connect it to stock prices in a more direct way. Even though the connection is because of sales MIT, the majority is revenue-- like, 30% of [INAUDIBLE] is revenue.

But they have at least some metrics that are environmental transparency that people try to connect with stock prices. I have to say that public companies have a really hard time to make these aspirational goals because they're not connected to value directly. This long term, short term trade off that prevents them of embedding a good sustainability practice is very hard.

Let me give you the other answer. Who was talking here? Seventh Generation said that, although they're not publicly traded. They said, our shareholders know they're getting lower return of reinvestment than other.

And they buy our stock with that understanding, that? Unilever shareholders know that Unilever is making some trade offs for the long term and they're buying their stock. Now, the promise and the belief is that they're going to recover that value over the long run.

But ultimately speaking, I do not think there's a good connection you can make. Allow me to be totally honest. I have not seen it that you can make a real concrete connection between stock price and sustainability in the short term. What I've heard the argument, which I think is a real argument, is a company that can develop this kind of system is a company that must have a really sophisticated management, which means this company must be run by smart people, which means this company must be making some good money.

But this is a very indirect argument. It's not a direct argument. Oh, you did this?

You can get money back. It's more, if you're willing to pull this off and not crash your business, that means that you are really well run management company and we believe that you are going to be able to achieve other things. Because besides all your complexity, you have been able to embed sustainability in your day to day operations. Is that-- it's kind of a poor answer.

STUDENT: --Wall Street is going to let you get away with it for so long, right?

PROFESSOR: Yeah, for so long, yes. At some point, that's kind of an argument of capabilities more than an argument of delivering results is just, you should be able to do this well.

STUDENT: Just to quickly build on this today, we actually had the CEO of-- I'm going to remember the name of the company in a little while. They were investing not in sustainability in the green part by [? Mosely ?] and investing in their employees and paying them higher-- Costco.

PROFESSOR: Costco-- Costco is big.

STUDENT: --while still offering low prices to customers. And he was mentioning-- like, he was talking about his experience of having a really hard time at the beginning when they initially went public because people in Wall Street didn't understand. But they kept true to their strategy and that now, their stock price has gone up significantly.

And people who buy their stock and trade it and it's actually a very valuable stock. But then it does take time. If your entire strategy is long term, you kind of wait for Wall Street to understand it [INAUDIBLE] and into it. But if you have a strategy, it does work. You wait for them, though.

PROFESSOR: I think that's the-- yeah, I agree. I think that's possible. Yes, it's always possible.

Let me actually say two more things on setting goals and targets. So I'm trying to emphasize this point. Supplier selection-- let's talk about when you want to go to your tier one suppliers and make them greener, right?

And you want to really make them part of your strategy. If there's no measure in your scorecards to your supplier selection, this means nothing. So when the buyer is sitting in the table and he has to make a decision on which supplier to select and there's no metric there that says sustainability, trust me.

That person is going to do their best effort. Now, the problem is if you have never done it, how do you start? How do you start putting a metric there?

You have to give people-- educate them first. You have to first-- I recommend you to measure this, right? It's not part of our evaluation process.

You do that for two or three years. You first understand your capability of your suppliers. You have to get to know them.

You get their information. That's why the CDP report actually is quite good. You have a structured processes.

They start knowing, you know, we should mention your [INAUDIBLE]. Oh really? OK, let me start measuring.

And the next year they come back. I still do not know how to do it. The next year, they come back.

And eventually, they get good at measuring. You do the same for waste. You do the same for the things you care about.

You have to somehow teach them what it takes to measure what you care about. Once they have that in a few iterations, then you can really start putting it in a contract. And I think if you see what companies have done-- whom I was talking recently?

Yes, this may not be public yet. So they have been asking for their sustainability metric from their suppliers for five years. And next year is going to be mandatory.

It's going to be a requirement for buying products. It's a big CPG company-- huge. And they have done all the traditional greenhouse gas metrics, waste metrics, traditional ones.

And they have always said information for you to look into that information. Starting next year, it's going to be mandatory. And if yo don't have it, you're not our supplier.

And in five years, they're going to reduce by 20%. So I'm pointing out is that there's a first phase where you just ask for the information. So people build their own metric systems you cannot expect them to be sustainable if you have never measured.

So by asking your supplies for the information, even though it's not in the scorecard of selection, you start this cycle for them. This is what matters to me. When I'm buying from you, I want you to tell me how much energy you use, how much waste you generate.

Oh, it matters to you? So I better start measuring it. You somehow start creating this cycle with your suppliers.

But only the moment where you change this cycle into, I bring it into your procurement organization as a decision making process like price, quality, safety, CO2 reduction. Only at that time it really becomes part of your business. Otherwise, it's just good wishing.

That is a long process. So what I just said is a five year cycle, especially when you talk about a large company with many, many suppliers. Great example of these-- Natura in Brazil.

They have specific targets for the supplies of CO2 reduction. They have their templates. This is how you fill it out, how much energy you do.

This is exactly what you expect from them. And this is exactly how much reduction I expect from you year to year. And if you don't get it, you're no longer my supplier.

But this took some time, even though they're a very sustainable company as a whole. And this is what you do internally. And of course, always you have to stay in tuned with your moral compass, your partner that tell you which are the issues that you think, which areas of the world you have to be worried about that could have more regulation, right? How can you make sure your reputation-- you have to defend all those dimensions.

So this is, I think, how you can develop long term strategy. So we have to wrap up now. But on Wednesday, we're going to hear someone from a company hopefully tell them how they did it.

So keep some of these things in mind to see if we can identify these patterns going or not. I think some of them are there. Others are not.

So we'll see how good they are in their strategy. Ask tough questions and that I wanted to do more guidance, but I talk a lot. For the team project-- so what we want in your team project is to not only both of you dividing your companies, but actually comparing them, discussing what makes them better, and eventually trying to make an assessment is, is this company that has a higher ranking in CDP deserve this or not? And this is why they deserve it based on some of the things we've talked so far, all right? OK, thank you so much and I will see you on Wednesday