

## ESG Essentials: What You Need To Know Now

### Episode 9 – Mapping Supply Chains for ESG Success

**Colvin:** Welcome back to "ESG Essentials: What You Need to Know Now," It's a podcast from Fox Rothschild. I'm your host, [David Colvin](#), co-chair of the firm's ESG practice group. And for our new listeners out there, Fox's series of short, bite-sized podcasts cover core ESG concepts and explore important issues for businesses that are concerned with developing and deploying a solid ESG profile; responding to increased scrutiny from regulators, investors or consumers regarding their environmental and social impact; and minimizing the potential legal business and reputation risks associated with ESG.

In today's episode, we'll be talking about ESG in the context of supply chain diligence and management. And for that conversation, I'm pleased and honored to welcome [Dr. Leo Bonanni](#). Dr. Bonanni is the founder and CEO of [Sourcemap](#). That's a leader in the field of supply chain due diligence. Dr. Bonanni is a frequent lecturer on supply chain transparency. He's testified before the U.S. Senate Finance Committee on forced labor enforcement.

Dr. Bonanni has published articles in *Fast Company* and has been featured in publications including NPR, *Fortune*, *The Wall Street Journal*, *GreenBiz* and *Sourcing Journal*. Dr. Bonanni has been named among America's most promising social entrepreneurs by *Bloomberg Business Week*, among the 100 most influential people in business ethics by *Ecosphere* and is a 2021 Environment and Energy Leader 100 honoree.

Dr. Bonanni holds both a Ph.D. and master's degree from the Massachusetts Institute of Technology. And with that background, Dr. Bonanni, I'm pleased to welcome you to the podcast. Thank you so much for being here.

**Bonanni:** Thanks for having me.

**Colvin:** Absolutely. Just to level set, what we're seeing in the space of ESG... and not to state the obvious, but with ESG becoming more prevalent in many ways, companies are feeling a tremendous amount of pressure to differentiate themselves in the marketplace when it comes to their environmental and social impact. And as one would expect, companies are tending to focus on their own environmental and social impact, their direct environmental and social impact, when they're thinking about ESG. But for companies that may be in the early stages of developing an ESG profile, from your perspective and given your experience in the field, why is it imperative that those companies should be thinking about and addressing potential ESG risks and opportunities within their supply chain?

**Bonanni:** The world has really shifted from ESG being really a corporate responsibility issue focused entirely on annual reporting to a real kind of advocacy focus where brands are choosing topics that they know their customers, their consumers, will care about and advocating for. And whether those communities in their supply chains, whether those are ecosystems that need to be preserved, whether it's carbon or waste or water or energy, all of those are going to have much bigger impact in their supply chains than in their direct operations.

Most companies these days have outsourced almost all of their production overseas. And when you follow those supply chains down to, especially the raw material, that's where the vast majority of impacts and risks can be felt. And so for most companies that have embarked on the ESG roadmap for a few years, they have already settled on those parts of the supply chain, those parts near the raw material origins, where communities, where ecosystems, are most exposed, most vulnerable, and they've put all of their efforts there.

**Colvin:** And so understanding that obviously a number of companies are down the road in terms of developing their ESG roadmap and they're making appropriate disclosures. And as we know, with the SEC's proposed rule, at least with respect to climate disclosures, there's going to be a whole lot more disclosing going on in terms of what companies need to be reporting in terms of at least their environmental impact. And I fully expect that we can expect the social reporting to follow as well.

So in terms of supply chains and keeping our focus there, what do you see as the most significant problems and issues facing supply chains or companies that have outsourced their productions overseas? What's the most significant issue you're seeing today?

**Bonanni:** We just reached a point where companies are expected to be a lot more accurate in their ESG disclosures. It's come because in large part, it used to be impossible for a company to actually know exactly who they were doing business with. So, if you were making candy bars in the U.S., you didn't know which were your cocoa farmers in west Africa. And if you were selling t-shirts, you didn't know exactly which cotton farms were being used to harvest the raw material. In the last 10 years, there's been a marked evolution in technology. I mean, we introduced supply chain mapping software more than 11 years ago. What that's done is, it's allowed companies to get much more precision on knowing exactly who they buy from. And at the same time, as they've been able to get that precision, we've seen the supply chain completely shift in terms of companies differentiating themselves and saying, "No, my raw material, my manufactured goods, my imports, they are less risky and I can prove to you exactly how."

The biggest risks we're seeing now are definitely tied to forced labor, child labor and any kind of exploitation or trafficking of people in the supply chain. A few years ago, it was deforestation and ecosystems. All of these converge on the same issues, which is on the one hand, you need to know exactly who you're doing business with because you could have a factory that is treating its workers well across the street from a factory that isn't. You could have a farm that is heirloom next to a farm that was on recently deforested land. So, you need this fine-tuned understanding of your suppliers.

At the same time, technology has now become widespread. That allows companies to know exactly who they're doing business with and to make very clear their intentions in the contracts they have with suppliers that they're only going to do business with those upstream suppliers who follow and adhere to their standard.

**Colvin:** And, you know, you talked a little bit, Doctor, about forced labor becoming a more prevalent issue: child labor and human trafficking. How has the United States -- I know you testified before the U.S. Senate Finance Committee on these issues -- how has the United States led the way to address and hopefully attempt to mitigate some of those important issues?

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1

**Bonanni:** Yeah, the United States definitely has the strictest approach to enforcing standards in the supply chains for products that are imported into the U.S. of any country in the world. Really it came out of a business driver. Essentially, for decades, we've known that companies that outsource their manufacturing have a somewhat unfair advantage because they might be outsourcing it from parts of the world where the standards are simply different. And so to compete on the same level, playing field, companies that are insourcing or sourcing from countries with higher standards shouldn't be at a disadvantage. And so this was manifested in the last five years through the Section 307 of the TerraPact, which has basically allowed Customs to seize shipments at the border that it suspects of being made with forced labor at any stage of the supply chain in the raw materials or in the manufacturing. This ability to actually tie manufacturers and brands doing business in the U.S. directly to problems in the upstream supply chain.... and I mean, this could happen in not just the suppliers that these brands know about, but the suppliers of the suppliers of the suppliers. There are basically millions of places in the world where this could happen and a U.S. brand or manufacturer could be exposed to this enforcement action.

By extending that accountability to essentially the globe, the U.S. has set a very high bar for supply chain due diligence, for corporate responsibility. And by actually suspending shipments, they've created not just the risk that a company won't be able to import goods, but also the risk to the reputation of those companies that are importing goods that are suspected of forced labor. They will announce those suspensions, and they'll give the companies some time to make their case and try to get the goods cleared.

And so, you know, the U.S. has no question set to the highest bar for supply chain due diligence. It's being followed very closely by the European legislation, which is going to start to take effect around deforestation and forced labor in 2023. And along with that, you know, what's come together is also a very clear idea of, what is supply chain due diligence? What should companies expect to know about the goods that they import? And it is actually having the intended effect of setting a level playing field, where it's not just the most responsible companies that are going to take care to map their supply chains and monitor the risks and the performance of suppliers. It's anybody who wants to do business in the U.S.

**Colvin:** I think that's really important for people to understand that from a regulatory perspective, obviously the U.S. has implemented certain regulations and certain laws, most recently with the Uyghur Forced Labor Prevention Act, which just went into effect. But in other ways as well, and that it's really the reputational risk -- separate and apart from any legal or regulatory risk -- that companies are facing with respect to not complying with the U.S. laws and regulations. But it's also the reputational risk that if they're using some supplier overseas, assuming they even know who that supplier is, to the extent that they're engaged in enforced labor or child labor or human trafficking or whatever the case may be, it's not going to be that supplier who's going to face the reputational harm, right? It's going to be the U.S. company that employed that supplier and contributed to those issues. So I think that's really important and that's one thing we try to drive home with our clients when we're talking to them about supply chain diligence and the importance of it.

So in terms of staying with sort of the forced labor and child labor, human trafficking idea, what can companies do? We talked about the regulatory piece, but what can companies themselves do to try to

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1

mitigate those risks? Because one thing that we struggle with is, it's one thing to have contracts that require representations and warranties that your supplier is going to behave appropriately and not engage in forced labor or human trafficking, and maybe even having audit rights that would allow companies to do diligence on the compliance with those reps and warranties. But many of these suppliers, if they even know who they are and if they're even one step removed from the supplier with whom they're working, what if they don't respond or what if they don't want to provide information? How do companies deal with that, in your experience?

**Bonanni:** Absolutely. I mean, look, one of the major benefits of this becoming regulated is that this is no longer optional. And so, when we were doing supply chain mapping 10 years ago, it was definitely seen more as a nuisance than a solution. A lot of the suppliers would say, "Why would I need to provide this information? Maybe I don't have it. Maybe I don't want to share it. Maybe none of my other customers are asking for it." So at least with the regulation, companies that export significant amounts of products to the U.S. are now accustomed to receiving requests for information from Sourcemap and to complying with them and actually competing with each other on just how much transparency they can provide.

Now that didn't happen overnight, and it didn't happen without a lot of alignment between the buyers in the U.S. and the suppliers overseas. Technology aside, and you need a lot of technology to manage this process, but what you need more than technology is alignment inside the U.S. company to say, "Look, we're only going to do business with compliance suppliers. We're going to measure transparency and traceability of the supply chain as one of those compliance metrics. And we're going to expect continuous improvement." So just like with quality control or Six Sigma or any kind of supply chain modernization, like just-in-time, this transparency and traceability to ensure standards are being met in a supply chain is becoming an operational concern. It's becoming data that importers should expect, and they should make it clear to the companies they do business with overseas that they're going to only do business with companies that can meet those standards. And they're going to prefer those companies that can provide more transparency.

There's a real commercial incentive to doing better, and it has to come from the procurements division. It's not just an ESG pursuit. It is really the buyers in the U.S. who need to make it very clear to their suppliers that they're going to be evaluated, not just on cost, not just on delivery, not just on quality, but also on transparency and compliance. And that, over time where we see the most successful importers are actually going back to their supply chain every year with a benchmark telling their suppliers exactly how they're doing in terms of traceability, compared to their peers and raising the bar for that continuous improvement.

**Colvin:** I think it's encouraging to hear that suppliers are becoming more receptive to companies demanding that they provide information, that they meet certain benchmarks. Because I think one of the natural concerns that companies have is simply what do I do, or how do I force this supplier that I need for whatever raw material or for whatever good or product, how do I force them to respond in a way that will actually help me then make the disclosures I need to make or help me make the decisions operationally and otherwise that are consistent with whatever ESG targets and profile the company has set forth. So, I think the fact that we're seeing now, or you're seeing at least, in the supply chain area that partners and other companies within the supply chain are becoming more receptive is good news for sure.

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1

Let's talk a little bit about Sourcemap, because I had the opportunity to take a look at the mapping solution that you and your colleagues have developed to assist companies with just understanding who their supply chain partners are. Because, as I'm sure you found many times and as you already alluded to, companies don't know necessarily who they're getting their cocoa from for their candy bars or who the cotton's coming from for the t-shirts. So your mapping solution, which I think is fantastic, really can provide companies with a leg up in understanding and mapping their overall supply chain and seeing where the gaps may be, either because of environmental or social risks, but also with respect to supply risk itself. In terms of making sure there's redundancy within the supply chain to address catastrophic weather events or political strife or whatever the case may be. So can you talk, Dr. Bonanni, a little bit about your mapping solution and how Sourcemap can help companies that are interested in understanding their supply chain better?

**Bonanni:** Yeah, this comes down to a completely new understanding of what is a supply chain. And this is back to the research that we were doing at MIT starting 15 years ago. Basically, if a supply chain is no longer just a company's direct suppliers, but it actually extends all the way to the raw materials, then it looks a lot more like a social network. And it's a network that for a decently sized multinational includes hundreds of thousands of individual businesses supplying into it. Very early on at the MIT Media Lab, the idea came to me to just build it as a social network. And essentially, allow brands and manufacturers to build out their own social networks by inviting their suppliers who invite their suppliers, who invite their suppliers and so on until the whole supply chain is mapped out.

So you can think of it as a tiny LinkedIn that every brand makes, but it's really a new frontier for supply chain management, and companies that we've been working with for more than a decade have had immense benefits because once all those suppliers, like you said, you're not just able to measure and mitigate risk or compliance. You're also able to find out when the harvest doesn't look like it's going to be as good as it was last year, or when there's a shipping delay that could trickle down to impacting your ability to serve customers. So, it's becoming really operational.

This is software as a service that these companies install and within a few months they will typically discover five to 10 times more suppliers than they ever knew they were doing business with. So, if you have a thousand suppliers, get ready to have 5,000. And of course, when you discover suppliers you didn't know you had in countries you may not have known you were doing business with immediately, the task of measuring the risk, measuring the performance, measuring the compliance, looking for any signs of fraud or waste or abuse of any kind, including sanctions violations, falls to us. So we have to immediately turn on a risk assessment tool that measures that newly discovered supply chain for any potential exposure to the U.S. importer or brand.

Then ultimately the job comes down to verifying all of that data and making sure that those suppliers that might be in a high-risk area are actually adhering to standards and that all of the goods are actually passing through all of the companies that they are supposed to be passing through. So all told, that's supply chain mapping. That transaction traceability, it's what Sourcemap does at very large scale. You can imagine our customers collect terabytes of data every year from thousands, if not tens or hundreds of thousands of suppliers in their supply chains.

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1

**Colvin:** Yeah. And just hearing that for brands that might have a thousand suppliers, that, that number may balloon to 5,000 or even more as just daunting. And then thinking about the number of companies that you assist in doing the map and understanding who sits behind each of the suppliers that they know about. Can you talk just a little bit about how you go about verifying the data that you identify? Obviously it's an automated process, but what types of data sources do you look to in order to determine whether or not a supplier is a good supplier behaving appropriately under all circumstances, that sort of thing? And will be able to provide whatever the goods are or materials are? As you said, how do you know that the harvest might not be great this year? Can you just talk a little bit about that?

**Bonanni:** Absolutely. The good news is that the cloud has become really powerful in the last 10 years. And even though you might discover you have five or 10,000 new suppliers you didn't know you had, that's actually a very manageable number of entities for a cloud-based software to monitor.

Really, the monitoring is done three different ways. There is the data that we get from the suppliers to make sure that they have all the policies and procedures and standards in place. In some cases, they might even have to share payroll records and other detailed production data to make sure they can actually make the products they say they make.

Then there's cross-referencing. We are looking for violations of the sanctions lists. We're looking for affiliated companies on the listed entities that are tied to Uyghur labor. So any number of lists of companies at risks. Heat maps of companies in areas where there are real problems. And these heat maps are pretty detailed. If you're buying leather and that leather is coming from areas in the Amazon that are tied to deforestation, we're actually using satellite imagery to find out whether those farms were tied to deforestation in the last few months or years. Very good data is now available to cross reference against your supplier list in real time to keep track of whether or not they're compliant or at risk of falling out of compliance.

And then last but not least, it's a fraud detection algorithm. So, think about how your credit card company flags suspicious transactions that fall out of patterns. That's really the benefit of mapping and tracing your supply chain for three, six, nine months is that you start to build up that trove of data that can be used to just make sure that nothing is falling out of norms. And that's how we'll know if the yields are suspiciously high or low, if we think that a supplier might be using an unauthorized subcontractor, if there's not quite enough people on those payroll records to be making all of those articles of clothing. So, that's really the highest level of assurance and that's really the benefit of continuously mapping and tracing your supply chain.

**Colvin:** Well, listen, it's a fantastic solution. And you know, we strongly encourage our listeners to check it out to the extent that it's applicable to their brand and their business.

I really appreciate, Dr. Bonanni, your time today. I think this has been a really productive and informative discussion around supply chain diligence and management, and really highlighting some of the issues that companies that are either just starting out in their ESG journey or have been down the road for a few years. I think there's a lot in here for people to take away and apply in their business. So thank you again very much for being with us. We really appreciate it.

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1

**Bonanni:** Thanks for having me. It's been a pleasure.

**Colvin:** Absolutely. So, that concludes this episode of "ESG Essentials: What You Need to Know Now." We ask that y'all stay tuned in and check us out for the next episode, which will be coming your way shortly.

And with respect to this particular podcast, there will be a link to Sourcemap in the Twitter feed or in the LinkedIn feed, all the various social media feeds, so that you can check them out directly. And again, we thank Dr. Leo Bonanni for his time today.

Copyright © 2022. Fox Rothschild LLP. All Rights Reserved.

All content of this podcast is the property and copyright of Fox Rothschild LLP and may not be reproduced in any format without prior express permission. Contact [marketing@foxrothschild.com](mailto:marketing@foxrothschild.com) for more information or to seek permission to reproduce content.

088937\00001\135818742.1