

# Financed Emissions and the Wild World of EV Start-Ups

## Featuring:

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Bentley Kaplan:

Hello, and welcome to the weekly edition of ESG Now. We cover how the environment, our society and corporate governance affects and are affected by our economy. I'm Bentley Kaplan, you host for this episode, as we kick into the middle of February. We've got two stories for you to today. First, we're going to hear from my colleagues, Nigel Fletcher and Carrie Wang about the way that greenhouse gas emissions can be traced back to a bank's loan book and investments. And we'll also find out how well the industry is doing to disclose and reduce those emissions amid all the popping of champagne and net zero pledges. And for a short and spicy finish, I'm going to bug Yu Ishihara about some of the intrigue behind recent SPAC listed electric vehicle startups, which is not something I can say 10 times fast. We'll try to figure out if some early stumbles are part of a broader cautionary tale or just a blip on a supercharged race to success. Thanks for sticking around. Let's do this.

I remember the early days of thinking about climate change and emissions. When I first heard the terms scope one and two and three, it was funny because there were all these very specific semantics in dividing scope one from scope two. Talking about things like factory lighting and smelters and heaters. And then scope three were kind of like these distant academic emissions. Technically interesting, but come on, too far away to really do anything about it. And a lot has happened since those naive days. And I'm guessing not just for me.

Because one of the biggest questions facing climate investors and even climate activists is where the pressure points are for the scope one and two and three emissions. Getting into the machinery of a carbon intensive economy and knowing what to adjust and where. And if you do pop the hood of this global economy and start following all the different colored wires, you'll find they all lead to the same connection point, the same source that powers them. You'll eventually get to banks, and other financial institutions, the companies that make capital available for all other businesses to generate their own scope one, two, and yes, scope three emissions. Which is where our first two guests come in. Nigel Fletcher out of our London office and Carrie Wang out of our New York office are busy working on a paper on the financed emissions of banks, big banks, so-called global systemically important banks, or GSBs if you're itching for an acronym. And this is foundational work, it's a starting point to figure out where things stand. Here's Nigel.

Nigel Fletcher:

So banks, they play a crucial role in economic development as financial intermediaries. And although the greenhouse gases that they produce from their own operations are small compared to other industries, they can have a significant indirect impact through their financing activities, so the loans and the investment portfolio. And these fall under the scope free category 15, which are the so-called financed emissions. In theory, if you think of the bank's loan book, they're obviously within their lending portfolios, they're lending to a number of different sectors, both from like the commercial standpoint, then also from a retail standpoint, from mortgages and things like that.

So what they have to do is in order to calculate those financed emissions, the most straightforward way would be that every company they're lending to reports those emissions themselves, so they're able to use those reported emissions into their scope free emissions. But that's obviously not always the case and currently, so they kind of have to estimate those emissions. And so for instance, there are frameworks like the Partnership for Carbon Accounting Financials that has guidelines for banks, how they may calculate emissions. So one, if I give an example, if you look at the residential mortgages, that guidelines, it talks about using the energy performance certificates to sort of estimate the carbon emissions from the lending portfolio. And that's something that we do see some of the European banks doing with their portfolios.

Bentley Kaplan:

Right. So maybe unsurprisingly, the lion's share of a bank's emissions come out in scope three. And there are ways of figuring out a bank's finance emissions. Nigel mentioned PCAF, the Partnership for Carbon Accounting Financials, which has put together a pretty thorough guideline for institutions like banks to calculate, or at least to carefully estimate, their financed emissions. And this is across six different asset classes, including listed equity and corporate bonds or business loans and unlisted equity, and even things like loans for motor vehicles. And these types of methodologies are certainly important and certainly helpful. But in their research into the GSBs, the world's big banks, Carrie and Nigel found some pretty big holes in disclosure. But my guests reckoned that there's currently a lot of pressure on banks, both externally and internally to do something about that. Here's Carrie.

Carrie Wang:

Out of all the G-SIBs currently, only 40% of them disclose some level of finance emission data. For the ones that haven't disclosed, they're first of all, and the regulatory pressure, which is lots of the countries and regions currently are planning mandatory climate disclosures. For example, in June, 2021, the G7 countries, they have endorsed the TCFD mandatory alignment. And later that year, we have also seen Switzerland, Hong Kong and even EU are also developing the mandatory disclosure requirement. In October, 2021, TCFD issued a new supplemental guidance for banks to disclose their emissions for their lending and other financial activities, the Net Zero Banking Alliance, which currently have over a hundred banks around the globe as members, and that includes 24 GSB's. So those members, they are required to annually publish their finance emissions profile and set their interim targets within 18 months of joining. So like for those banks, they are under the timeline pressure to actually measure and report their finance emissions.

Bentley Kaplan:

Like any good ESG story, this one is laced with acronyms. We did PCAF and GSB's, but Carrie added in the G7, the TCFD and the NZBA. Well, technically the G7 isn't an ESG acronym and neither is the EU, but they're backing tells us just how much momentum is building behind efforts to get better disclosure on financed emissions. And the NZBA, or the Net Zero Banking Alliance, is an effort by the banking industry to get on the right side of this pressure by bringing together banks that have committed to net zero emissions by 2050, but also more tangible outcomes like publishing annual data on financed emissions. And also on set incredible reduction targets within 18 months of joining the NZBA and dropping those hashtag net zero, hashtag committed to the future tweets. And last but not least, you've got the Taskforce on Climate Related Financial Disclosures or the good old TCFD, which basically provides a framework for companies to explain what climate risks they face and how these link to financial impacts.

And it gets a little kinked here because the TCFD reports are kind of designed for investors, which includes banks. But banks also have their own investors in their own shareholders. And as Carrie explained, in October, 2021, the TCFD updated guidance on how banks should disclose emissions in their lending activities and other intermediary roles. So the upshot of this is that if you're a bank, what you can do now is plug the results of the PCAF into the TCFD, and BOB is your uncle. And as the screws tighten on banks that haven't taken these steps, well, it's going to look worse and worse. Unmeasured risk, as Nigel told me, is unmanageable risk.

Nigel Fletcher:

I'll quote something that the Partnership for Carbon Accounting Financial say. In their documents, they talk about that being able to measure and disclose financed emissions, this is an important first step to align with the Paris agreement. So essentially measuring financed emissions is kind of at the center of the puzzle. So it feeds into scenario analysis. It feeds into the reporting as Carrie mentioned, and it feeds into the target setting. As an investor, if you were looking at a bank, the fact that the bank's sort of disclosing financed emissions, that may demonstrate that they have sort of a more comprehensive sort of climate risk awareness relative to peers. To be able to identify and manage potential risk, the bank needs to kind of know what emissions they're financing in the first place in their loans and investments.

I think the second thing from an investor standpoint would be from a reporting standpoint. So with the financial institutions, if they're disclosing these financial emissions, so the financial institutions would be meeting their reporting recommendations of the TCFD, but then that in turn would enable the shareholders and all the investors in the banks to also meet their own reporting requirements. And then finally from sort of a target setting standpoint, in order to set targets to reduce these emissions, they need to kind of establish what the current level of financed emissions are. Because without having that baseline, it would be kind of difficult to set a reduction sort of pathway.

Bentley Kaplan:

Right, so part of that is a no brainer. If you don't actually measure anything, you can't really aim to improve it. And if you don't disclose it, your investors don't know if you're doing a decent job. But actually running these fairly intricate and complex calculations is a tricky proposal if you're a big, fancy

financial institution, and probably not one you can just crack with some elbow grease and a few Excel functions. But solving tricky investor problems is kind of what we love doing at MSCI. So without giving too much away, I should probably mention that some of my much smarter colleagues are tackling this challenge head on and are working on a financed emissions tool that follows the principles laid out by the Partnership of Carbon Accounting Financials or PCAF. So do watch this space. I'm sure there'll be more to follow before too long.

For our second story on today's show, we're going to stick with scope three emissions, funny enough. But not the emissions financed by banks, something a little more tangible. The scope three emissions of automobile manufacturers, car makers, and specifically the downstream scope three emissions that are generated when cars and trucks are, you know, driven. And you can see how finding a low or zero emission alternative to combustion engines would be a very appealing prospect for investors. And that appeal translates into demand. And in response to this demand, we've seen kind of what you would expect to see, a flurry of new and exciting startups ready to shake up the world of electric vehicles. And like any startup, one of the main challenges is how do we get funding? We have this great idea and an urge to change the world, but no money. Now one option is to go through the VC route.

Look for angel investors, go through rounds and rounds of funding, hoping to edge your proof of concept forward inch by inch, sweating bullets as you endure a real life version of dragon's den. Or if that sounds a little arduous, you can get a little more creative. And one of these creative options is to attach yourself to something called a Special Purpose Acquisition Company or a SPAC. In very broad strokes, and in grave danger of offending my governance colleagues, a SPAC is kind of like an empty company without all the bells and whistles that a typical company usually has, like a factory or a workforce. A SPAC goes through an IPO and lists in the so-called public market.

People can buy shares in the SPAC and they do so on the understanding that the SPAC is going to take that cash and go and acquire or merge with another usually private company. The SPAC acts as a kind of middleman between capital markets and new and exciting companies. In this case, an EV company, allowing it to kind of go public without the usual complications and hassle of a full on IPO. But it turns out, when you take this massive enthusiasm for electric vehicles and you mix it with this corporate magic, that is a SPAC merger listing, things get a little odd. And someone that knows a whole lot more than me on these recent happenings is Yu Ishihara out of our Tokyo office.

Yu Ishihara:

Yeah. So it's a really interesting phenomenon. And I think there's sort of been a perfect storm of opportunity in terms of demand, both from the EV startup side and from public market investors. When people hear EV company, I imagine the majority would certainly think of Tesla. Obviously they've enjoyed a tremendous amount of success in creating and proving the viability of the electric vehicle business model. And I think that most certainly has been a driving factor of this influx of capital into these SPACs that have merged with EV startups. You know, investors are all basically chasing the next Tesla, so to speak. And so over the last two years off the top of my head, I can think of more than 10 EV startups that merged with a SPAC to go public. And that's just companies that manufacture cars. I'm not including component makers, battery makers, peripheral software, or infrastructure place. Companies like Lucid Group, Canoo, Arrival, Faraday Future, or even Nikola.

And, you know, while there generally has been periods of strong stock performance from most of these SPACs initially, a lot of it potentially could have been driven by, again, this supply dynamic sort of

chasing the next big thing. And more recently, these EV SPACs performance has been lackluster as of late. And I don't think it's just driven by shifts in market sentiment. But recent news flow shows legitimate concerns around the viability of some of these companies.

Yu Ishihara:

The EVs SPAC space has been mired in controversies around corporate governance or ethics practices, most recently brought to light at companies like Faraday Future or Electric Last Mile Solutions, both of which have seen their management teams resign and be investigated over controversies around misleading financial claims or unethical behavior. And another instance at a company, Lordstown Motors, again which also faces investigations for potential false claims on vehicle orders. So while the SPAC route certainly has an enabling capability for these EV startups to access capital while still being at a very early stage of development, there certainly seems to be an element of let the buyer be aware for investors in this space.

Bentley Kaplan:

Yeah. As you work through that list, it's clear that things got pretty messy, pretty fast. In trying to capitalize on this investor demand, EV startups played a little fast and a little loose with things like order books and share purchases to name a few. And that's the thing about a SPAC merger listing. It gives companies a sort of backdoor into public markets, which seems convenient and maybe gets them to market quicker, but all of that mess and fuss of an IPO also includes a lot of due diligence. In this case, almost literally kicking the tires before buying the car. And skipping that step can put investors into very difficult situations.

Now, the story of SPACs and their current popularity is really fascinating. And I can almost hear some of my governance colleagues banging on the door to get a word in, so we'll be sure to tackle the topic in a future episode. But I asked you to take us through a more pressing question. And that is, if these electric vehicle startups that have stumbled through some controversy are part of a wider risk that innovative new companies may struggle to get going in a market that features some big, well funded incumbents like Toyota or VW? Or whether this is just a blip and that the auto industry is ripe for disruption from some plucky upstarts.

Yu Ishihara:

Yeah. You know, I think at this point, no one can deny that the automotive industry is undergoing a huge disruption as it moves away from traditional combustion engine cars. The major incumbents are all making significant commitments to transition their product portfolios towards electric or electrified vehicles. And they're backing these commitments up with pretty huge capital investments. Companies like GM and their \$35 billion commitment to electrification. Ford and 30 billion, Volkswagen, 73 billion euros. Toyota, 8 trillion yen, all by the mid 2020s to 2030. Even beyond the incumbents, we're also seeing potential new entrants from other industries, such as tech hardware companies like Sony, Baidu, Foxconn, and of course, the perennial rumors surrounding a company like Apple, all potentially moving into this EV space. So then going back to these SPAC [merged 00:16:18] EV startups, I think you really are asking the right question, which is, what are they bringing? Well, what are they bringing that's new or innovative that Tesla did years ago?

You know, what is the competitive advantage that will allow them to recreate the same success? And when you think about Tesla, I think it's also so important to remember that people tend to forget that in the earlier days, Tesla struggled mightily to secure adequate capital and to start mass producing at scale. And this was still when competition for electric vehicles was virtually nonexistent. So for these newer EV startups, while easier access to capital via SPAC listing has certainly helped a lot of these companies overcome the initial hurdles around funding, the automobile industry is notoriously capital intensive and fiercely competitive. And I don't think that's really going to change in the era of EVs. So even though EV startups may have a shiny new prototype and boast big projections for future market share gains, I'd certainly point to the recent flurry of controversies, making a strong case that not all these EV startups are necessarily created equal.

Bentley Kaplan:

Not all EV startups are created equal, as YU tells us. But in a competitive, exciting market, it probably feels a little like there will be multiple new opportunities to invest and enjoy an unstoppable ride into a low carbon future. And we can't really know which companies are going to capitalize on this insatiable demand for electric vehicles. Maybe it will be the giants of today as they take huge barrels of cash and pivot their combustion engines into electric ones, allowing them to keep their customer base. Or maybe it's rock and roll startups with charismatic founders and juicy growth forecasts. Or maybe it's a side stepping tech hardware company that takes the whole industry by surprise one dark and stormy night.

But whoever it is, it's probably worth remembering that some good old fashioned due diligence won't go amiss. And that it's always a good idea to kick the tires before you leave the lot. And investors are going to try and dodge the pitfalls and catch the tailwinds in a dynamic EV market, a market looking to solve the problem of scope three emissions in transport. But they'll also need to keep a wary eye on banks and other financial institutions that are still on the first few steps of a long disclosure journey for their own scope three emissions.

And this is where things get very tricky, where there won't always be the relatively direct solution of producing electric cars. Because not only will banks and their investors need to figure out the complex assumptions of financed emissions, but they'll also have to address the looming question that sits just beyond that. Once the world's big banks figure out just how extensively their financing greenhouse gas emissions, they're going to have to figure out how to reduce those emissions, how to reallocate capital, which losses to cut, which new ventures to back and all of that under ever increasing scrutiny from investors, regulators, and climate activists. And unfortunately not even SPAC magic can make that headache disappear.

And that is it for the week. A massive thanks to Carrie and Nigel and Yu for their takes on the news with an ESG twist. And the big thanks to you, our great and wondrous listeners. It's always great to give you more of what you want to hear. So let us know what you think of financed emissions or PCAF or electric vehicles or SPACs. Or even better, let us know if there's any content you'd like us to cover in future shows. Drop any of those ideas by the contact us link in our homepage on [msci.com](https://www.msci.com), address it to Mike and Bentley, and it'll find its way to our hearts. Speaking of Mike, he's back again next week. So until then take care of yourselves and those closest to you and heck even a colleague or two that brightens up the old workday. Thanks again, until next time.

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