

# Non-Profits Sue VW and China Talks Big

# Featuring:

**Siyao He,** ESG Researcher, MSCI **Yu Ishhara,** ESG Researcher, MSCI

# Mike Disabato:

What's up, everyone? And welcome to the weekly edition of ESG Now, where we cover how the environment, our society, and corporate governance affects, and are affected by, our economy. I'm your host, Mike Disabato, and we have two stories for you this week. The first is on the validity of a lawsuit filed by environmental non-profits against a number of German automakers. Then we discuss China's ambitious targets for peak carbon emissions in 2030, and carbon neutrality in 2060. Thanks, as always, for joining us. Stay tuned.

## Mike Disabato:

Cars are one of the darlings of decarbonization. It is still a high-emitting sector, but it also already has the necessary technology in place to strongly lower its carbon emissions. Cars also represent one of the major consumer choices that can be made to help combat climate. Buy an electric car and take some of the climate anxiety out of your commute. For a variety of reasons we're not going to get into, in this episode, most auto companies have already unveiled their plans to drastically lower their fleet emissions in the coming decade.

# Mike Disabato:

Volkswagen is one of those companies. The German auto manufacturer has tried to rehab its tarnished image, due to its diesel dupe scandal, by investing more than 41 Billion U.S. dollars in developing electric cars. But a threat of legal action by Greenpeace and Deutsche Umwelthilfe... I'm going to pronounce that as DUH. That's their acronym, and they are a non-profit with environmental and consumer protection concerns in Germany. They called the ambitions of VW, and other German rivals, such as Daimler and BMW into question. And they've done that by suing all these companies.

# Mike Disabato:

What they say is that these companies have failed to decarbonize their fleets fast enough to be in line with the Paris Agreement. VW and others have responded by saying they're going as fast as possible, and further acceleration is literally impossible. Now I have a deep love for environment non-profits but, like any advocacy group, they have an agenda. So what I want to know is whether these claims by Greenpeace and DUH are valid or not. So I called up Yu Ishihara, who is a colleague of mine, who covers the auto industry for us, and asked him to give us a quick take on whether the suits have any validity.

# Yu Ishihara:

I think the environmentalists, their case definitely has a bit of a base. The issue is that the problem that the automakers face is just a little bit more complex than that. So to simply just call out Volkswagen, or its rivals, as slow in terms of its environmental reform, I actually think might be a little



bit unfair, certainly from an industry standpoint, since Volkswagen could actually be perceived to be one of the standard bearers, at least in terms of transitioning their product portfolio from combustion engine towards electric vehicles. They have a pretty robust strategy. They have a lot of targets out there, I think, 70% of vehicles in Europe to be battery electric by, I think it was 2033 or 2035, and subsequent markets, as well, U.S., China, but some of their sub-brands like Audi, I think they have a pledge to be all electric by 2026. And, again, they've committed a substantial amount of money, something north of 30 Billion U.S. dollars to build out 240 gigawatts worth of battery capacity for the group's coming EV Fleets. So, in terms of the sheer targets that they've announced, they're certainly aggressive, at least compared to some of their peers.

## Mike Disabato:

By the way, 2030 is the right answer there. The goal is for 70% of new VW cars in Europe to be fully electric by 2030. So they will probably stop making internal combustion engine vehicles for the European market entirely by around 2033 or 2035. That's what Yu was referencing, there. If it's not already obvious by VW being a German auto manufacturer, the majority of their revenue comes from the EU. So when they say they want to change how they sell cars in the EU, they're basically saying they want to change how they sell cars.

# Mike Disabato:

But the question that these non-profits are rising is the question of time, and I think that's important because, often in our researching on this podcast, we talk about the need for companies to have already begun the work to decarbonize their systems and operations if they want to hit any reduction targets that the world is putting forth. With the auto sector, the big difference here is that consumers view buying a car as a personal choice.

#### Mike Disabato:

The marketing that companies use is directly tied to our sense of self. So they had this barrier there. So I wanted to hear from Yu was what he thought about these time constraints, maybe not whether or not the claims are valid to Greenpeace, but how are these companies doing in terms of preparing themselves for a decarbonized future?

# Yu Ishihara:

To take a step back, MSCI has done some research that's shown that, on average, around 78% of total emissions released by these car companies come from the actual vehicles themselves. So, when we talk about environmental reform at a car maker, it obviously comes down to electrification of these fleets. Then you start to think about a normal car, whether it's based on internal combustion or even an electric vehicle. Normally, the process, going from design to production, to actually hitting a dealer's lot, to having myself go out and buy it, it takes a couple of years, even with increasing platforming and modularization. So bear that in mind. For an internal combustion engine the supply chain has already built out... but for EVs, for example, on Volkswagen, or any of their rivals would not only need to go out and redesign the cars, which they're doing now, but they have to retool their factories, secure the minerals, and build out the battery capacity, which I mentioned before. Then, we get to the point of heavy investment current cost of batteries.



#### Yu Ishihara:

So, even if you could accelerate all this, the companies face this issue of making enough money on these cars as quickly as possible to keep the company going. Again, this might be less of a concern to the environmental activists campaigning against them, but the auto supply chain is a significant source of jobs in countries like Germany. So, if we start talking about reducing profitability, whether it's because we're aggressively launching EVs, or because we're just not launching as many internal combustion engine cars, this will obviously impact the supply chain. This could obviously impact employment, and not to mention dampen company cash flows, which will be the seeds for future investment in electrification. This is all before we even start talking about things that you mentioned before, like charting infrastructure, and consumer taste, and affordability, and whether they want these things or not.

# Mike Disabato:

The big question, too, is batteries. Greenpeace and DU might be right or wrong but, in order for any company to create a zero carbon electric fleet, they need a lot of batteries. And it was just announced that Toyota would spend around nine billion U.S. over the next decade to build factories for electric car batteries. And is that what is needed by auto companies, their own battery factories alongside their car manufacturing facilities?

# Yu Ishihara:

There's certainly companies out there which specialize in electric vehicle batteries today, outside of the automakers. The big ones obviously are CATL in China. We have a couple of Korean [inaudible 00:07:12] companies. So Toyota have announced, I think, a total of a 14 Billion U.S. dollar investment towards their EV battery effort. Five billion of that is RND, and then the nine billion is what you mentioned before. It's for capacity expansion to build out battery factories.

# Yu Ishihara:

This is not unique to Toyota. Volkswagen, GM, Ford have made similar sorts of commitments. It's like you mentioned before. Right? To electrify their fleets, these companies need to go out there and secure a battery supply, and that is going to be the single most critical factor to making sure that any of these companies hits their electrification targets.

# Yu Ishihara:

So, even Toyota's nine billion dollars spent on global battery capacity, I think the claim is that by 2030 this will deliver them around 200 gigawatts worth of battery capacity. You can do a little bit of quick mental math, here. If you assume an average EV has around 50 kilowatt hour battery... You can use whatever number you want. I just chose 50. If it's 50, their 200 gigawatt hours is equivalent to 4,000,000 EVs annually, compared to roughly 10 million cars that Toyota sells per year.

# Yu Ishihara:

Then, Toyota says that, separately, on their targets, by 2030, that they will have eight million electrified vehicles, which includes hybrids, and which obviously have much smaller batteries. So that nine billion investment will probably be enough to cover Toyota's EV. But, again, some of their alliance partners like Subaru, Mazda, or Suzuki, which, again, do not have the capacity to make this kind of investment, but they will share, and they will have to deliver. The point I wanted to make was that it's a huge amount of money, but it's still not enough to electrify every single Toyota out there.



#### Mike Disabato:

A fair point, and we are just going to have to watch to see how the suit plays out, because it came right after, and referenced, a landmark [inaudible 00:08:58] constitutional court ruling that was done in April, of 2021, in Germany, where the Judge ruled that future generations have a fundamental right to climate protection and can take action against large companies to secure that right. So this might be one case of many that investors need to watch, as the world continues to limp toward a decarbonized future.

# Mike Disabato:

If you look at the union of concerned scientists, earth systems data on carbon emissions, you see that there's China at the top, at 28% of global emissions, the U.S. second at 15%, India and Russia around six and seven percent and, then, everyone else is at about one percent. So how China and the U.S. move so, too, go a large part of the world's carbon emissions.

# Mike Disabato:

In November 2020, China set one of the more ambitious targets, aiming to reach a peak in greenhouse gas emissions by 2030 and become carbon neutral by 2060. This became known as the 30/60 plan, and it's still in development. But my colleagues, Siyao He, and Siping Guo finally got enough data on what needed to be done to write a report on China's target and how it's going to affect the industry.

# Mike Disabato:

But, first, before we go into their interview, we need to get some key figures down from the report to set the stage. At the moment, if this regulation works, China's national emissions is estimated to peak at 28.5 billion tons in 2030. So there's room for nationwide emissions to continue to increase by an estimated 2.4% annually, from today to 2030, but nothing more. To achieve this, the most carbon intensive sectors, which are materials, utilities, industrials, and of course the energy sector, will bear the highest regulatory pressure to cut emissions.

# Mike Disabato:

By the way, materials is the sector that consists of construction, metals and mining, paper and forestry, stuff like that. And the industrial sector consists of transportation, machinery, aerospace and defense, and others. So, to talk about China's 2030 Plan, I called up Siyao, and what I first wanted to understand from her was whether this was actually an ambitious goal, one that would impact companies and change everything for capital holders.

# Siyao He:

That's actually interesting because it's the first time China adopt a concept like picking nations and cutting neutrality, also known as [inaudible 00:11:22]. So I will say it's a very important progress because the emission data are no longer hide behind the economic data like GDP or revenue. The government are not only set targets for emission intensity, but also add constraints to total emission, and that need to become the net zero by 2060. Also, as I said before, it's like a really huge commitment and that will influence across different industries.



#### Mike Disabato:

Look, there's no way to know if China can achieve its goal. I could speculate, but I cannot speculate. But when there is data on whether the world's largest submitter can meet a climate goal, you've got to, sort of, speculate using legally-approved scenario tools which we got. Here is what Siyao and her coauthor, Siping Guo, found when they looked at a representative group of companies in China. They found that if the companies kept going as they are now, they would annually emit 1.3 billion tons of CO2 more than what China has budgeted for its 2030 peak. It's those sectors I mentioned before that are the problems, the materials, industrials, energy, and utility sector, and they also have to carry most of the water when it comes to decarbonization, because they represent 90% of the emissions gap in China.

# Mike Disabato:

At a company level, it's one of China's cement producers, Anhui Conch cement that was identified as the biggest contributor to the emissions gap, and two of China's largest independent power producers, Huaneng Power International and Huadian Power International, followed closely behind mostly due to their coal intensive operations. You might be thinking, well, cement, for example. This is one of the basic building blocks of our societies. It's a material whose molecular structure is not so easily substituted for another cleaner version. So how are we going to fix this quickly? And you would be right. Yet these companies have a trick up their sleeve. The are developing patents that will hopefully lead to breakthroughs in low-carbon materials that can be used widely.

# Siyao He:

We found it has exactly those sectors with highest emission pressure have the highest potential. If we look at [inaudible 00:13:28], and that part is what we use, the [inaudible 00:13:34] revenue and their potential patent to calculate the future green revenue by 2030.

# Mike Disabato:

Future green revenue, it's an odd term of ours, but what it is, is an estimation of a company's potential sales from the development... That's where the patents come in, and use of low-carbon technologies. There's mundane but vital machinery in the works, like more efficient combustion boilers that produce steam to generate electricity, but with much less emissions attached to it. There's also smarter factories and water turbine technologies, or lithium-ION batteries, and ultracapacitors that Siping and Siyao found in their research of these Chinese representative companies, things that are already in development that we hope can be used to lower the world's emissions. And, according to the authors, in China, it's the companies that pollute the most that are working the hardest to develop the solutions that Siyao just said. And they're encouraged by market forces to do so, not only because of China's internal policies, but largest industrial demand for green materials is on the rise, like the proposal by the EU on the taxation of imports that have a greater carbon intensity. Then the region allows for certain energy-intensive domestic industries.

# Mike Disabato:

Since the EU is China's largest trading partner, as of 2020, such moves matter. And Siyao and Siping also wrote about the fact that capital is starting to get behind the move toward a low-carbon society in China. ESG is on the rise, and it's a signal, maybe a call, for active engagement from institutional investors on pushing companies and governments to make these revolutionary changes to reduce their greenhouse gas emissions by forcing conventional businesses to make a fundamental low-



carbon transition, and to incentivize new businesses to seize opportunities offered by technology. Or, at least, that's what Siping and Siyao have written.

#### Mike Disabato:

And that's it for the week. I want to thank Yu and Siyao for discussing this week's news with an ESG twist, and I wanted to thank you, so much, for listening. If you like what you heard, don't forget to rate and review us. It makes us more visible on the podcast pages. And subscribe, if you want to hear us every week. Thanks, again, and talk to you soon.

# Mike Disabato:

The MSCI ESG Research Podcast is provided by MSCI Inc.'s subsidiary, MSCI ESG Research, LLC, a registered investment advisor under the Investment Advisors Act of 1940. This recording and data mentioned herein has not been submitted, nor received approval from, the United States Securities and Exchange Commission, or any other regulatory body. The analysis discussed should not be taken as an indication or guarantee of any future performance, analysis forecast, or prediction. The information contained in this recording is not for reproduction, in whole or in part, without prior written permission from MSCI ESG Research. None of the discussion or analysis put forth in this recording constitutes an offer to buy or sell, or a promotional recommendation of security financial instrument or product or trading strategy. Further, none of the information is intended to constitute investment advice or recommendation to make, or refrain from making, any kind of investment decision, and may not be relied on as such. The information provided here is as is, and the user of the information assumes the entire risk of any use that may make, or permit to made, of the information. Thank you.

# **About MSCI**

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit **www.msci.com**.

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or redisseminated in whole or in part without prior written permission from MSCI.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security,





investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company fillings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

Privacy notice: For information about how MSCI ESG Research LLC collects and uses personal data concerning officers and directors, please refer to our Privacy Notice at https://www.msci.com/privacy-pledge.