

Carbon Credits: Permission to Pollute, or Pivotal for Progress?

Does investment in carbon credits hinder decarbonization among the world's largest companies?

Table of Contents

- 3** Introduction
- 4** Methodology
- 7** Results
- 10** Decarbonization leaders
- 15** Questions to consider
- 19** Conclusion
- 21** Carbon Credit Analytics



Introduction

There's a common belief that companies purchase carbon credits or 'offsets' in order to avoid taking real action to cut greenhouse gas emissions. We wanted to find out whether this was really the case.

Spoiler: it's not.

A recent flurry of media attention has labeled carbon credits as bad news, but we believe this messaging lacks nuance. Carbon offsetting projects come with their flaws, but high-quality credits are crucial for limiting global warming to below 1.5° in line with the Paris Agreement.

One key argument against carbon credits is that they give organizations a 'license to pollute', allowing them to buy their way out of decarbonizing and continue with business as usual.

It's a tempting narrative to believe—but it's not true.

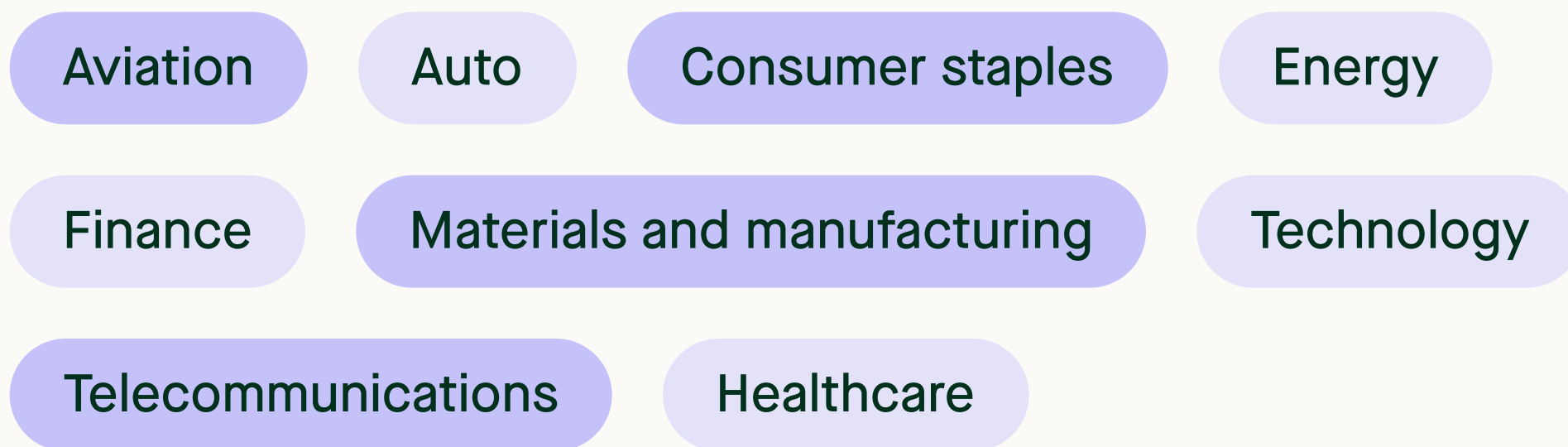
We analyzed data from ~100 of the largest businesses across industries to see whether investments in carbon credits indicated slower decarbonization rates. And what we found would surprise those who see carbon credits as a way to avoid taking real climate action.

Let's take a look.

Methodology

How did we calculate our results?

To get an indicative look at decarbonization and credit usage among corporations in different sectors and different locations, we analyzed 100 of the largest businesses across:



The data spanned nine years (2013-2021), and of these 102 companies, 51 used carbon credits, while 51 did not.

Where did we find the data?

The data used in our analysis is Scope 1 and 2 emission data, as well as information on carbon credit purchases, extracted from publicly available sustainability reports and disclosures—namely, the CDP database.

Scope 1 emissions

Scope 1 emissions are direct emissions generated from sources that a company owns or controls, such as vehicles, boilers, and manufacturing technology.

Scope 2 emissions

Scope 2 emissions are ‘indirect’ emissions generated from a company’s purchased energy, including electricity, steam, heat, or cooling.

Limitations of the data

While we did our best to draw balanced conclusions from publicly available data in sustainability reports, it's important that we share a few caveats.

First, because we couldn't analyze data from every organization disclosing climate data, we chose a balanced sample of 102 companies representing different sectors.

Second, the emissions data analyzed covers only Scope 1 and Scope 2. Scope 3 includes emissions from all suppliers and vendors, which can't be directly controlled by the company under analysis.

While evaluating Scope 2 emissions, we aimed to use Scope 2 location-based emission data found in sustainability reports. When that was not available, we used Scope 2 market-based data. However, because we are looking at rates of change over time, this does not affect the end result of the analysis.

And finally, though we did our best to gather and synthesize as much comprehensive data as possible, the data we sourced is not perfect and is not complete for every year.

This process illuminated the pressing need for mandatory, standardized climate disclosures.

Results

What does the data say?

The data reveals that the average annual emissions reductions by these ~100 companies is approximately 5%.

But here's where it gets interesting: on average, companies that buy carbon credits are simultaneously cutting their Scope 1 and 2 emissions by 6.2% per year. Meanwhile, companies that don't use carbon credits are cutting emissions by only 3.4% per year.

It's important to note that figures represent reductions in actual emissions - not net emissions - meaning that a company's use of carbon credits does not directly impact these numbers. But many will be surprised to learn that **investment in carbon credits** coincides with an almost 2x rate of emission reductions.

Different industries are decarbonizing at varying rates. Financial services have achieved the highest emission reductions. The airlines sector also has achieved higher emission reductions, which is most likely attributable to the effects of the COVID-19 pandemic.

When we remove the airlines vertical from the analysis, the trend remains but by less than the 2x rate—still demonstrating that companies that buy carbon credits decarbonize at a higher rate than companies that don't purchase carbon credits.

Meanwhile, manufacturing and technology companies appear to be the slowest to reduce emissions, which is likely driven by the high costs of implementing cleaner manufacturing techniques and tooling, and the rapid growth of technology corporations' operations in recent years.

Annual decarbonization rates

Average across 100 companies	Companies that buy carbon credits	Companies that don't buy carbon credits
4.9%	6.2%	3.4%

Who should care?

This analysis is not only informative, but also has implications for many stakeholders in the voluntary carbon markets. We are excited to engage in discussions around these findings and continue to investigate the relationship between emission reductions and purchasing carbon credits.

If you're an [asset manager](#) or [trader](#), it is critical to gain transparency and understand the impact and risk of your investments. To learn more about how we gathered this data and how you can better access carbon credit retirement history that affects your portfolios:

[Request a demo here](#)

If you're a [sustainability leader](#), key stakeholders within your organization can reference these results to further shape corporate ESG strategies. Following the mitigation hierarchy by prioritizing reducing emissions and then sourcing high-quality credits can unlock meaningful climate action and mitigate reputational risk. To learn more about how to source high-quality credits and benchmark your company's progress against other industry leaders:

[Schedule a call](#)

Decarbonization leaders

A look at some of the fastest decarbonizing companies around the world

Our research uncovered notable attempts by market-leading companies that are cutting emissions rapidly, while also compensating for residual emissions through carbon credits.

BANK OF AMERICA

Financial services company

Bank of America has publicly committed to reaching net zero before 2050 across its financing activities, operations, and supply chain. Since 2010, the company has cut energy consumption by 47%, switched to 100% renewable energy, and claims carbon neutrality across Scope 1 and 2 emissions (2019). Additionally, its Environmental Business Initiative will provide \$1 trillion of financial capital to develop solutions to climate change and other environmental challenges.

Annual decarbonization rate	9.5%
CO2e emissions	1.35M tonnes in 2014 vs. 658K tonnes in 2021
Actions taken	Reports indicate that reductions came from a combination of site upgrades, adopting more efficient technologies and systems, switching to renewable electricity providers and integrating energy efficiency into new facilities.
Carbon credits retired	273K from 2020 - 2021
Type of carbon credits	Nature-based solutions supporting environmental conservation and rehabilitation. The company has invested in GreenTrees , North America's largest reforestation project, and a peatland restoration project in Indonesia. Other projects in Kenya and Peru focus on providing economic opportunities to local communities through sustainability projects.



A look at some of the fastest decarbonizing companies around the world Continued

VISA

Global financial services company

In 2020, Visa achieved carbon neutrality across its operations through energy efficiency initiatives, a transition to 100% renewable energy, and ‘limited’ investment in carbon credits to compensate for residual emissions. The company plans to be net zero by 2040 in line with the SBTi’s guidelines and is dedicated to supporting the transition to a low-carbon economy through its products, services and brand.

Annual decarbonization rate	22%
CO2e emissions	81K tonnes in 2013 compared to 4K tonnes in 2021
Actions taken	Reports indicate that reductions came from moving to a renewable electricity provider
Carbon credits retired	65K from 2020 - 2021
Type of carbon credits	A portfolio of nature-based and technology-based credits including forest preservation, reforestation, renewable energy and clean cookstoves.



A look at some of the fastest decarbonizing companies around the world Continued

TELEFÓNICA

Telecommunications company

Spanish telecommunications company Telefónica set a public goal of achieving net zero emissions across its value chain by 2040, through a 90% cut in emissions and the use of carbon credits to neutralize residual emissions. Since 2015, the company has reduced Scope 1 and 2 emissions by 70% and Scope 3 emissions by 27%.

Annual decarbonization rate	19%
CO2e emissions	1.95M tonnes in 2015 compared to 537K tonnes in 2021
Actions taken	Reports indicate that reductions came from energy efficiency improvements, 100% renewable electricity in Europe, Brazil and Peru, and internal shadow pricing on carbon for hardware purchases that consume fossil fuels, electricity or use refrigerant gases.
Carbon credits retired	141K from 2020 - 2021
Type of carbon credits	Telefónica has publicly stated a preference for nature-based solutions, and in the short term, will purchase credits that reduce emissions from deforestation and degradation, in addition to carbon removal credits from sequestration projects. The company has committed to 1t.org to conserve and plant 1.5 million trees this decade.



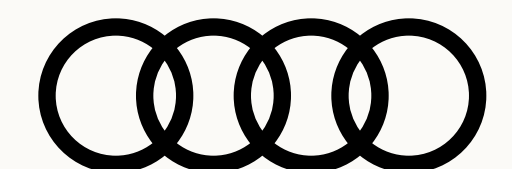
A look at some of the fastest decarbonizing companies around the world Continued

AUDI

German auto manufacturer

Audi's sustainability roadmap reveals its commitment to reducing the carbon emissions of its vehicles and their production. It has also committed to developing sustainable manufacturing processes and changing its resource consumption to contribute to the circular economy. It plans to make all production sites net carbon neutral by 2025, and to phase out the production of vehicles with internal combustion engines by 2033.

Annual decarbonization rate	11%
CO2e emissions	644K tonnes in 2014 compared to 233K tonnes in 2021
Carbon credits retired	141K from 2020 - 2021
Type of carbon credits	<u>Initially supporting</u> climate protection projects in agriculture, forestry, and renewable energy. The Volkswagen Group is invested in Indonesia's Katigan Mentaya peatland protection project.



Questions to consider

Can we judge environmental impact by decarbonization rates alone?

Although decarbonization rates are a key indicator of climate progress (and tell a more meaningful story than carbon credit purchases or 'net' emissions), it's important to assess decarbonization rates in context.

For example, sectors such as oil and gas tend to score well on decarbonization rates, which is likely attributable to their high annual emissions starting points—cutting anything is easier when it exists in excess. In contrast, some technology companies report slower decarbonization rates, because they started with lower annual emissions rates overall.

So while the decarbonization rate matters, we must look at a company's overall circumstances, including industry, emissions starting points, emissions in relation to revenue, and more.

Is there a link between greater decarbonization rates and higher quality carbon credit purchases?

With all the recent press attention on carbon credits, offset quality is an important part of the corporate sustainability discussion. But carbon credit ratings companies and data have only emerged recently.

Without the robust carbon credit evaluation tools that exist in voluntary carbon markets today, many companies investing in carbon credits for the last decade or more likely had little insight into the quality of their credit purchases.

While we have some visibility into the credits these companies have purchased and retired, it's important to note that the quality will vary—something the companies themselves might not have known at the time of purchase.

As carbon markets become more sophisticated, it will be far easier for companies to evaluate carbon credits and buy only the highest quality—in fact, they'll have no excuse not to. Sylvera's in-depth ratings equip buyers with the required transparency and insight needed to invest in high-quality carbon credits.

Spotlight on:

Sylvera's new Carbon Credit Analytics tool

Sylvera's latest product release enables buyers to optimize and benchmark the quality of their carbon credit portfolios. Our Carbon Credit Analytics tool gives buyers insightful data points and visibility into industry and company-level credit portfolios—data previously very difficult and time-consuming for buyers to access.

Is this the path to progress?

Yet even without data on quality, this study demonstrates that investment in carbon credits doesn't stop companies from taking meaningful climate action. We always recommend following the mitigation hierarchy: prioritizing reducing emissions and then sourcing the highest quality credits.

Businesses combining these actions will help unlock the speed and scale needed to make meaningful climate progress to meet the Paris Agreement targets. As UN Secretary General António Guterres stated with the publication of [the latest IPCC synthesis report](#), "Our world needs climate action on all fronts - everything, everywhere, all at once." Companies need to leverage every tool available to collectively combat the climate crisis and secure a safe future for the planet and its inhabitants.

Conclusion

Credit where it's due

Analyzing the climate disclosures of some of the world's largest private organizations led us to four key conclusions:

1. Decarbonization rates must be evaluated in context.

For some organizations, decarbonization progress appears faster than others, largely due to a high baseline. It's important to evaluate decarbonization rates in context; companies with higher emission reductions might simply have a history of very high emissions to start with.

2. Investments in carbon credits positively coincide with decarbonization rates.

The narrative that companies use carbon credits to avoid emission reductions is not supported by this analysis; in reality, carbon credits are employed by companies taking more ambitious action to reduce their emissions. High-quality carbon credits are an essential feature of progressive climate strategies, and companies should continue to invest in them to compensate for residual emissions they can't cut. Funding for carbon avoidance and removal projects is critical now; these investments can't be delayed if we are to avoid the worst consequences of climate change.

3. The world desperately needs mandatory and standardized climate disclosures.

Inadequate climate data and disclosures are an enormous problem for investors, consumers and all relevant stakeholders. Mandatory and standardized reporting is a critical step on the path to net zero and would allow anyone to track corporate climate action accurately, hold companies accountable, and recognize individual and collective progress and achievement to serve as guiding lights for entire industries.

4. If companies reduce emissions and invest in high-quality carbon credits, the environmental impact is greater.

In this analysis, the companies who cut emissions and also bought carbon credits reduced 20% more gigatonnes of CO₂e than the companies who just cut their emissions. If all businesses committed to reducing emissions and compensated for hard-to-abate emissions with high-quality carbon credits, it would unlock real, measurable, and global environmental impact.

Instead of being a license to pollute, corporate investment in carbon credits indicates a genuine commitment to climate action and decarbonization. The big takeaway for all companies, large or small, is that **carbon credits should not be abandoned—and rather, they should be incorporated into climate strategies.**

With partners like Sylvera available to ensure you're investing in the highest quality carbon reductions and removals, carbon credits can play a key role in corporate climate strategies and should be considered assets in the transition to a greener future.

Spotlight on:

Silvera's Carbon Credit Analytics

Silvera's Carbon Credit Analytics enables you to analyze and compare the historical performance of carbon credit portfolios across companies and industries so that you can plan, benchmark and de-risk your carbon investments.

What does Carbon Credits Analytics do?

Carbon Credit Analytics gives buyers access to information about the composition of carbon credit retirements across companies and industries. With this data, they can:

- ✔ Build effective carbon credit portfolios based on the latest market trends and retirement activity
- ✔ Optimize resources and gain efficiency in evaluating retirement data
- ✔ Track and compare retirement performances of peers, suppliers, and customers
- ✔ Perform in-depth analyses of historical retirements across companies and industries

Carbon Credit Analytics allows buyers to review the quality of retirements at market-level to understand macro trends, and at company-level to understand retirement strategies and preferences.

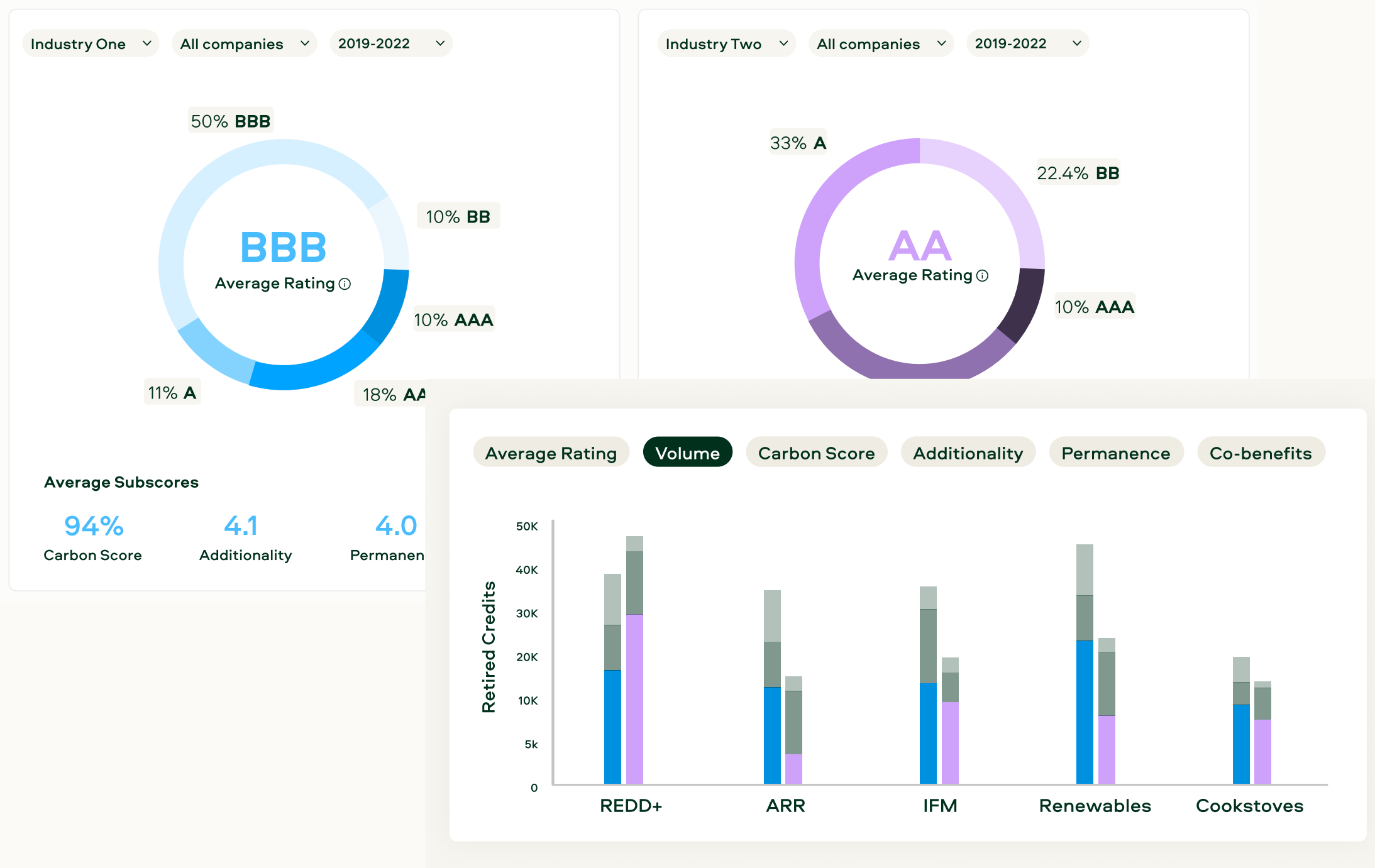
Data sources

Carbon Credit Analytics pulls credit retirement and quality data from:

- Registries (incl. Verra, Gold Standard, American Carbon Registry, Climate Action Reserve)
- Climate Disclosure Project (CDP)
- Publicly released sustainability, annual and/or ESG reports
- Silvera's proprietary carbon credit rating frameworks

Who needs Carbon Credit Analytics?

- ✔ Corporate sustainability teams
- ✔ Brokers, traders, and other intermediaries
- ✔ Consultancies
- ✔ Financial services firms
- ✔ Fund managers



To learn more about the Carbon Credit Analytics solution request a demo.

Request demo



Who trusts the Sylvera platform?

Our customers and partners span corporate buyers, traders and exchanges. They are often large institutions who have made net zero commitments, and who are the biggest buyers of carbon credits in the market.



Contact us to learn more.

Sylvera's mission is to be a source of truth for carbon markets.

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