



The voluntary carbon market: eight things to know for the year ahead

Introduction

Global carbon markets are currently experiencing a significant increase in attention, demand, technological innovation and sophistication. Prices are increasing, supply is changing and the standards for recognising quality projects are tightening. More and more companies are realising that within a comprehensive climate strategy, carbon credits are a tried and tested opportunity to compensate for their unavoidable emissions and support ambitious global climate action.

We have summarised eight trends to know about the shape of the carbon market today for both new market entrants and large-scale, long-term buyers. **While by no means exhaustive, these eight trends bring into focus market dynamics in order to paint a tentative view of how the voluntary carbon market will look in the future.** These insights will support companies looking to become more sophisticated in their procurement approach to carbon credits by moving from one-off purchases to long-term investments in projects that can support decarbonisation within the sectors and geographies they operate.

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#1

The VCM shows strong growth across key project types

What's happening in the voluntary carbon market (VCM) today?

Despite fears about the impact of the pandemic, the VCM grew significantly in 2020 and continued to grow in 2021. According to Trove Research, **the value of the primary VCM soared by 190% in the past year to just under US\$1bn.**¹

After years of carbon credit surplus, which has contributed to low carbon prices, the rapid rise in demand is broadly leading to a rise in prices. The two areas experiencing the biggest surge in the past year are credits generated from nature-based projects and credits that meet the requirements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

In the past 10 years, 836m tonnes of CO₂e have been reduced, removed and avoided thanks to the VCM.²

What does the future look like?

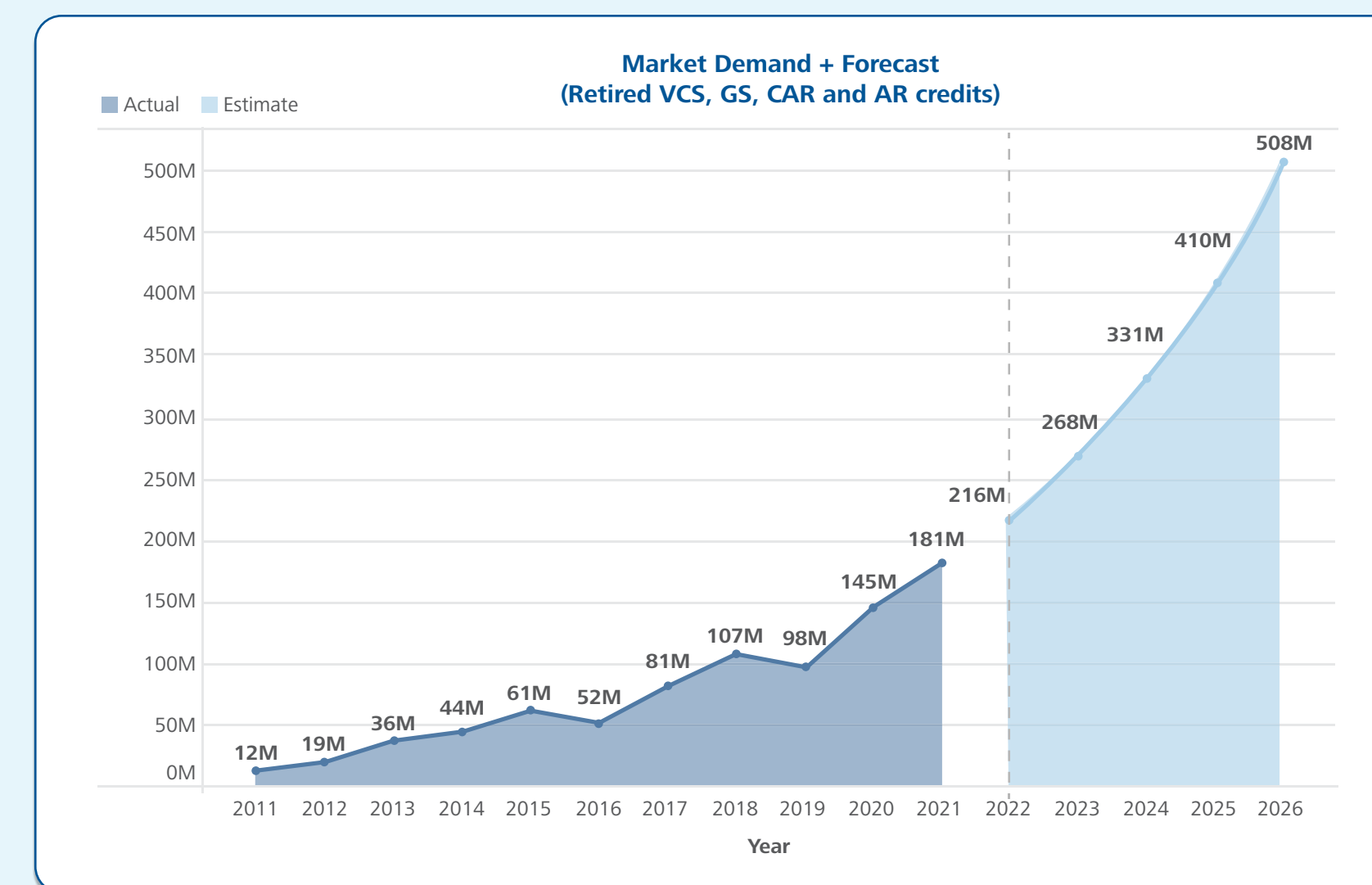
The graph to the right shows South Pole's forecast of how the carbon market might develop. On the other hand, market intelligence provider, Trove, forecasts that the voluntary carbon market will grow by 50% to 80% in 2022 to between US\$1.5bn and US\$1.7bn. They foresee a significant jump in demand: x5-10 in the next ten years; x8-20 by 2040; and x10-30 by 2050.³

¹ Trove Research, January 2022. VOLUNTARY CARBON MARKET: 2021 IN REVIEW AND 2022 OUTLOOK

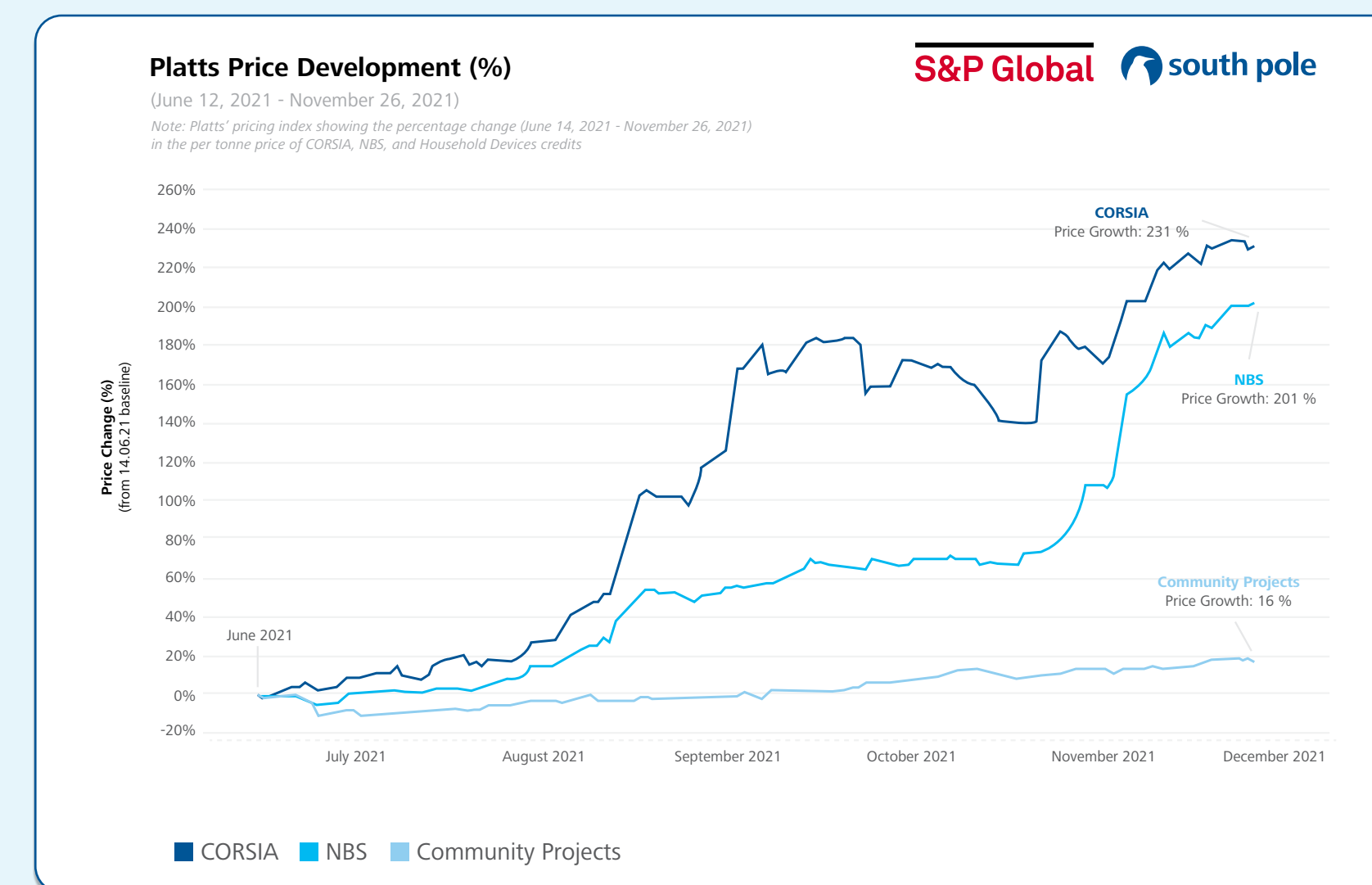
² South Pole based on publicly available registry data

³ Trove, Future Demand, Supply and Prices for Voluntary Carbon Credits – Keeping the Balance

Current market demand and forecasted growth



Market size and future growth



#2

A rising carbon price drives internal reductions and enables more and more ambitious projects to be developed

Rising carbon prices spells good news for two broad reasons.

Firstly, buying carbon credits puts a price on a company's carbon footprint; and this becomes a decision-making tool. As carbon credit prices go up, decision-makers are forced to consider whether it is more cost-effective to reduce their carbon footprint or to compensate for their emissions.

The higher the carbon price, the greater the business case for companies to focus on reductions first, so only the truly unavoidable emissions are compensated for using certified climate action projects.

Secondly, higher prices allow project owners and developers to invest in new, more ambitious climate action projects that go above and beyond regulatory requirements. This includes investments in scaling up innovative climate solutions, such as natural and technical carbon removals, which are needed to drive deep contributions to net zero.

On top of this, Trove, a specialist data, analysis and advisory firm, links the price of a carbon credit to the project's sustainable development co-benefits, such as biodiversity protection, improvements to public health and new employment opportunities.⁴ Given the huge potential for climate action projects in developing countries, carbon finance can help fund sustainable development where it's needed most. The higher the price, the higher the positive impact.

Rising carbon prices help us limit global warming to under 1.5 °C more quickly and more fairly.

⁴ Trove Research, [Future Demand, Supply and Prices for Voluntary Carbon Credits – Keeping the Balance, 2021](#)

Project spotlight: Muskita Landscape Protection

Muskitia pâsa klîn nâka - a reservoir of fresh air



"Looking after the mangroves is very important, it's not just about conserving the forests, but there's also the element of food security."

Wendy Bordas, Municipal Councillor

Mangroves are considered superhero ecosystems: they store vast amounts of carbon, protect the coastline from flooding and protect sea life. But they're under threat.

Now, thanks to an early-stage innovative blue carbon project, Indigenous and Afro-Honduran communities can access the resources and tools needed to conserve their forests and mangroves, while improving their livelihoods, increasing food security and engaging young people. [Discover the project.](#)

#3

Supply is changing: new actors, methodologies and project types

As the carbon market matures and garners further interest, there has been an uptick in factors that change and in some cases constrain the supply of carbon credits.

Firstly, the Paris Agreement. Under the Agreement, countries must raise the ambition of their emission reduction targets – referred to as Nationally Determined Contributions (NDCs) – every five years. Most recently, in 2021, countries submitted new NDCs that expanded the scope of climate action they would deliver.

Why does this matter for the VCM?

As mentioned above, a key requirement for certified climate action projects is additionality. This principle is upheld by the internationally recognised carbon standards that certify projects. The implication of this is that certain project types may no longer be additional and could not be certified, hence impacting the supply of carbon credits.

There is also accelerating momentum to develop methodologies that measure and certify more types of climate mitigation activities. Carbon certification standards uphold rigorous processes and require

collaboration between numerous technical experts to develop and approve environmentally sound methodologies.

New methodologies unlock a stream of carbon finance for both existing natural solutions and frontier technological solutions in dire need of funding. The last point to consider is the types of project being developed. After more than two decades of the voluntary market, the 'low hanging fruit' is being used up. Project developers must look for more opportunities; those previously dismissed as being too expensive due to the high underlying costs of actually generating the emission reductions may now have become viable with rising carbon credit prices. This is just a snapshot of the complex and evolving supply landscape.

What is additionality? One of the fundamental principles underpinning the VCM is that it funds activities that could **not** otherwise happen. Therefore, all the funded climate action activities are additional to what a country could achieve on its own, helping to speed up the global transition to net zero.



Catalysing biochar: a new carbon removal technology

South Pole is co-developing a cutting-edge carbon accounting methodology under one of the leading carbon standard, Verra, to measure the climate benefits of biochar. The new methodology will incentivise biochar emission reductions and removal activities and unlock its potential to mitigate climate change.

#4

Demand soars: companies recognise the role and value of carbon credits in a comprehensive climate strategy

Business leaders have grasped the urgency of the climate crisis and the opportunity that action brings.

However, even companies that are sincere in their efforts to decarbonise are left with unavoidable emissions, and many have a role, direct or indirect, in social or environmental damage. To demonstrate maximum climate action, companies are realizing they must take all efforts to reduce their own emissions and compensate for their unavoidable emissions through financing global reduction efforts. Carbon credits are a preferred financing mechanism as they represent results-based payments whose impacts are certified by credible and independent standards. Consequently, carbon credits have become an essential part of a holistic climate strategy that supports mitigation beyond companies' value chain* to drive the global low-carbon transition.

The Science Based Target initiative (SBTi), a standard setter for credible net zero strategies, suggests companies procure carbon credits while they implement stringent reduction measures: "purchasing high-quality carbon credits in addition to reducing emissions along a science-based trajectory can play a critical role in accelerating the transition to net-zero emissions at the global level."⁵ Once companies reach their net zero target, they can only use removals credits to neutralise their residual emissions. Further guidance is expected later this year on how companies can engage with beyond-value-chain mitigation alongside their science-based net zero targets.

“Companies are using carbon credits – over and above a Paris-aligned decarbonisation pathway – to show climate leadership. Therefore, we expect demand to move to newer and more expensive project types....this progression towards more ambitious projects is what should be happening in the market.”



Michael Weber, Director Carbon Portfolio, South Pole

Many companies are already sourcing carbon credits from projects close to where they have operations and there is a growing trend for companies to source carbon credits from within the same sector. This shows that companies are not only looking to reduce their own emissions, but also using carbon finance mechanisms to support the piloting of emerging solutions: the very solutions that they can use to reduce their emissions in the future, when they become more cost-effective and widely available. In this way, carbon credit procurement strategies can support sectoral decarbonisation.

* Beyond value chain mitigation represents efforts to reduce GHG emissions that are outside a companies Scope 1, 2 AND 3 emissions.

⁵ 1.0, Beyond Value Chain Mitigation FAQ, SBTi, 2021

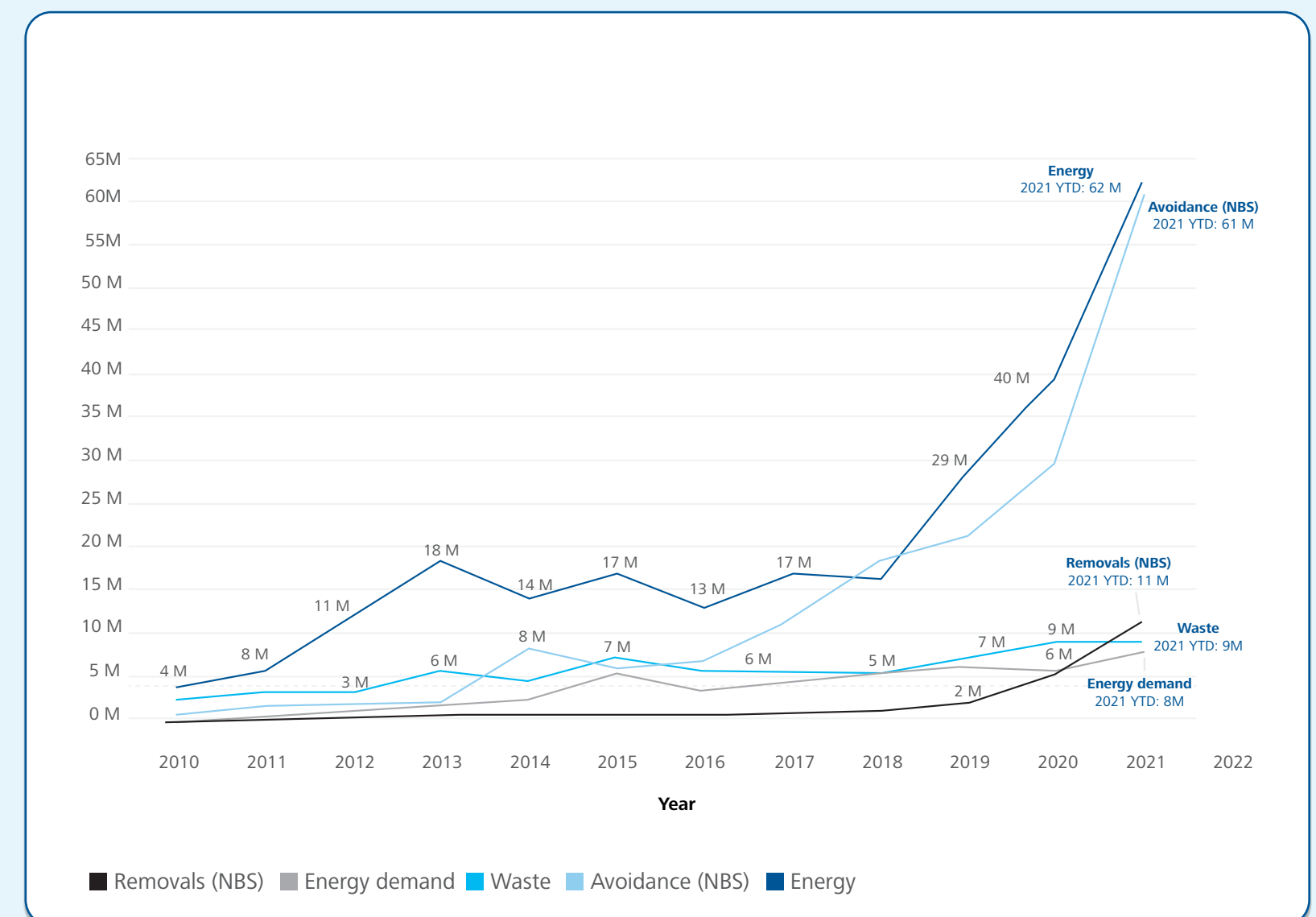
The push and pull of net zero



45% of all polled organisations have set net zero goals

have set net zero goals according to South Pole's yearly net zero report. [Download the report here](#) for a 360° view of our research.

Annual demand for carbon credits based on retirement data



#5

Carbon removals are at a tipping point, but in today's world, carbon avoidance credits reign supreme

In order to achieve their net zero goals, the majority of companies (61%) [surveyed in South Pole's annual net zero report](#) plan to use technological removal solutions at some point.

They need to be deployed at scale over the next decade for climate targets to be realised.

On the way to net zero, supporting carbon avoidance projects measurably and transparently drives climate action and SDG-aligned impacts worldwide.

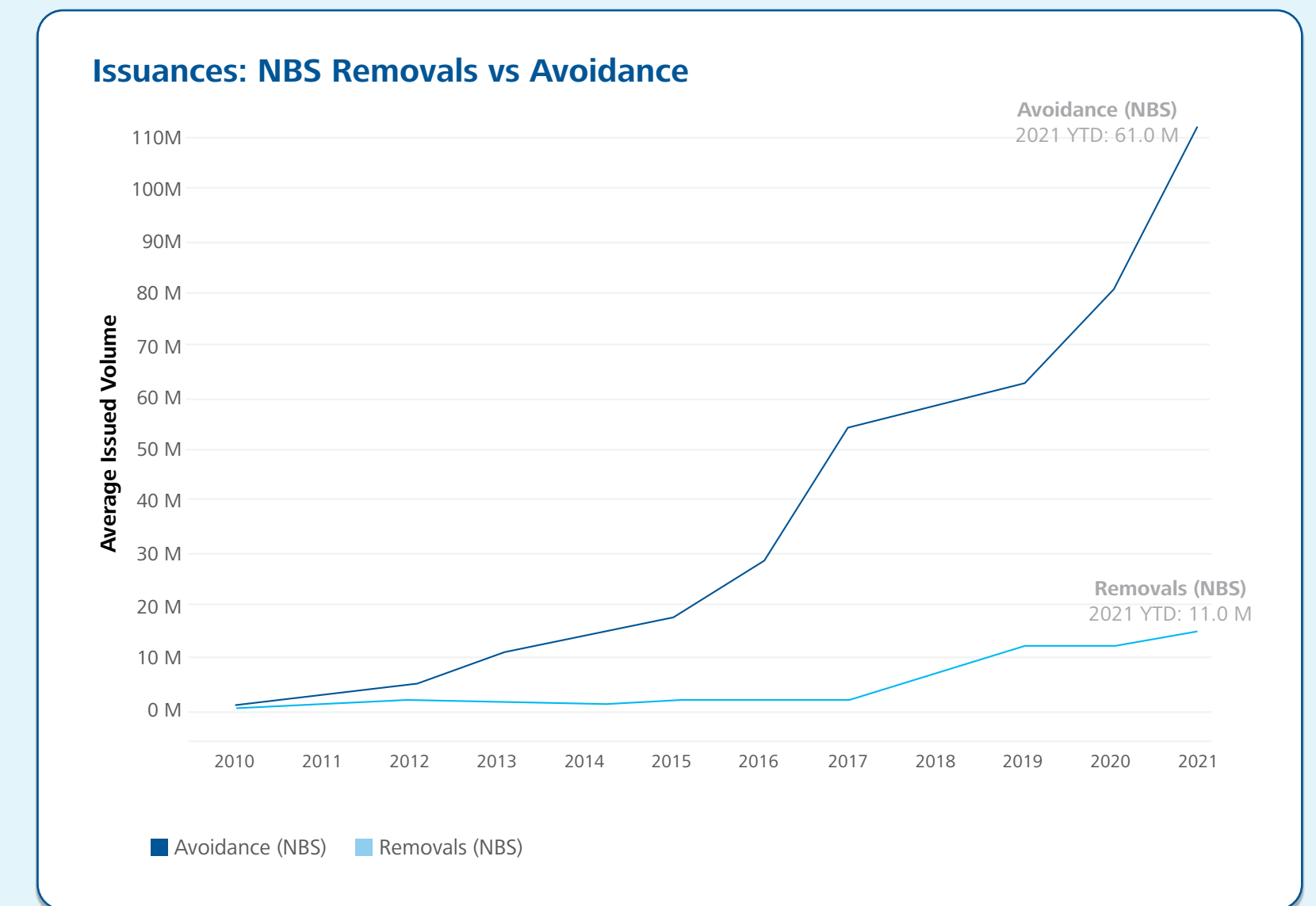
For technical carbon removals, cross-sector coalitions like the CCS+ Initiative, or market-based solutions like the Next Generation CDR Facility, are helping build robust and consistent frameworks with stringent environmental safeguards that unlock finance for emerging solutions. However, we are still far away from a net zero world, and today a huge amount of emissions are still left to be avoided.

We drastically need to curb emissions from being released from the most polluting industries by building intrinsically low-carbon sectors. The carbon market is one of the few tried and tested global mechanisms able to channel finance into climate projects at the scale and pace required.

Projects that stop deforestation, protect biodiversity and channel resources to forest-dwelling communities are desperately needed **today**: [the Kariba forest protection project shows](#) the long-term transformation that can be achieved through carbon finance. While other project types, like clean water or renewable energy allow people to access low-carbon services and infrastructure they need to improve their livelihoods.

A surge of interest in project co-benefits has led to both the leading carbon standard setters, Verra and Gold Standard updating their guidance for projects to monitor SDG impacts more transparently and consistently. With such advancements helping buyers to make more specific and credible impact claims, we expect growing interest projects with strong SDGs impacts.

Supply of NbS Removals vs Avoidance based on issuances



Issuances in 2021 for both NbS avoidance and removals credits effectively doubled compared to 2020. The surge of net zero claims has accelerated issuances of **nature-based removals credits (e.g. tree planting and restoration)**, but **avoidance (e.g. forest protection) credits** remains strong in part due to the recognition of the wide-reaching co-benefits such projects achieve.

Deep dive: Our annual net zero report uncovered how companies see the role of carbon removals within their corporate net zero emissions strategies. But with vague commitments and roadblocks abounding, clarity is needed. Read South Pole's report '[Charting carbon removals on the road to net zero](#)' and the [accompanying blog post](#) for the full picture.

#6

Following COP26, the lines between voluntary and compliance markets will blur increasingly

The voluntary and compliance markets have long been interlinked: movements in both markets affect each other's supply and demand of carbon credits, and, as a result, their availability and price. Now, the lines between both markets are blurring. Why, and what does this mean?

Recent international agreements – Article 6 and CORSIA– have helped align government and private sector climate action by signalling that carbon credits certified under certain standards within the voluntary market can be used for compliance purposes.

Article 6, agreed after three attempts by almost 200 countries at COP26, took the remarkable step of finally recognising the role of the market in achieving climate targets and keeping global warming to safe levels. While Article 6 does not directly set out the rules for the voluntary market, it does signal the increased convergence of the Paris Agreement and voluntary markets. It will be up to voluntary carbon standards, governments, and market participants to hash out the exact details of future engagement over the coming years.

CORSIA obliges aircraft operators to monitor and report their emissions from international flights from 2019 and obliges those voluntarily participating in its early stages to purchase carbon credits to compensate for any growth in CO₂ emissions. For the pilot phase, ICAO has defined the credits eligible for surrender for compliance with CORSIA, known as “Eligible Emission Units” (EEUs) which can come from eight approved programmes as of January 2022.

Both these agreements are examples of the blurring between the voluntary and compliance market. The likely result is that this will drive **increasingly competitive dynamics between compliance and voluntary buyers for the same pool of carbon credits**; this sets a standard for **what counts as high-environmental integrity offsetting within the VCM**.

“ The climate action landscape may be becoming more nuanced, but that doesn't have to mean it's more complicated. The principles of high quality action remain the same: **only work with reputable providers whose projects adhere to evolving international carbon standards; and embed carbon compensation into a wider climate strategy.** ”



Mireia Vilaplana, Director Carbon Policy, Finance and Carbon Markets, South Pole



#7

Digital momentum is growing, with the promise of enhancing environmental integrity and accelerating action

Over the last few years, novel blockchain-based applications have begun to be applied to the carbon market. This year we expect many of them will be adopted as part of day-to-day best practice. Examples of applications include digitising the measuring, reporting and verification (MRV) process for much-needed energy access projects, using AI and satellite imagery to assess the deforestation of critical ecosystems and allowing direct payment to local project owners to accelerate climate action for all.

There has also been a move to put carbon credits on-chain (blockchain). The most recent example of carbon credits going on chain has been bundling bulk volumes of carbon credits into a single 'token'. This 'tokenising' of carbon credits expands demand, which – for now – has been driving up prices of carbon credit while improving liquidity, price transparency, and lower transaction costs. However, carbon credit-backed blockchain tokens are beyond the control of the reputable carbon standard that issued them, and no longer covered by its policies and safeguards regarding the

intended use of the credit. This opens the door to possible misuse.

South Pole believes that decentralised finance (DeFi) and DLT have the potential to scale positive climate impacts, but like all technical advancements, this must not be at the expense of environmental integrity.

Deep dive: South Pole has partnered with Dryad Networks, an impact start-up, to bring ultra-early wildfire detection solutions to forest owners, which will help them better protect forests and create opportunities to access additional streams of carbon finance. [Read more here.](#)



#8

Expect the significant transformation of the market over the coming years

For the VCM to truly help companies – and the world – meet ambitious goals relating to the reduction of greenhouse gas emissions it needs to be strengthened and expanded. Using COP26 as a launchpad, a number of high-profile initiatives have set themselves the task. Ones to watch include:

- Integrity Council for the Voluntary Carbon Market (IC-VCM) aims to create a carbon market that turns voluntary carbon credits into a bankable commodity and facilitates the implementation of ambitious net zero plans. The idea behind this is that carbon credits thereby become more easily comparable.
- The Glasgow Financial Alliance for Net Zero (GFANZ) brings together more than 450 firms committed to funding US\$130 trillion of net zero transition projects. The GFANZ Chair, Mark Carney, suggested this sum will be enough to finance the delivery of net zero by 2050 targets.
- The Voluntary Carbon Market Integrity Initiative and the Science-based Targets Initiative are setting out the rules on how organisations can develop comprehensive, authentic and ambitious climate strategies to achieve net zero, and the role carbon credits has to play.

In conclusion

Tackling climate change has the power to change lives and business for the better, all over the globe. In its scaled-up form, the VCM will continue to be a valuable tool during the transition to full decarbonisation and a long-term solution for hard-to-abate emissions and sectors. And with the recent price increases and the right conditions, the VCM can drive the ambition of both buyers and project developers to create the systemic change needed to tackle the climate crisis.

Within an ambitious climate journey, companies can and must maximise their impact above and beyond their value chain: procuring carbon credits within the VCM is one of the best tools we have to do this.

Glossary

AR – American Registry

CAR – Climate Action Reserve

CORSIA – The Carbon Offsetting and Reduction Scheme for International Aviation

DeFi – Decentralised Finance

DLT – Distributed Ledger Technology

GFANZ – Glasgow Financial Alliance

GS – Gold Standard

NbS – Nature-based Solutions

NDC – Nationally Determined Contributions

MRV – Measuring, Reporting and Verification

UN SDGs – UN's Sustainable Development Goals

VCM – Voluntary Carbon Market

VCS – Voluntary Carbon Standard

References

- [Carbon Credit Demand, Supply and Prices - \(June 2021\) - Trove Research](#)
- [Carbon Offset Prices Could Increase Fifty-Fold by 2050 | BloombergNEF](#)

Where are you on your climate journey?



South Pole has been a project developer for the past 15 years, we're committed to channeling finance to projects that are making a positive impact for the planet day in day out. In the pursuit of driving meaningful change, to date, we've developed over 700 projects, pioneered some of the first gold standard certified projects and co-developed methodologies as well as SDG measurement tools. And we are only just getting started!

