

INTRODUCTION

This paper was developed by ACR to connect business leaders with research that bolsters the business case for purchasing and retiring high-quality carbon credits as part of a comprehensive climate strategy.

Designed to support the "Open Letter to Future Carbon Credit Buyers," this report summarizes a broad range of research, leading readers to specific sections in third-party research that are most relevant, highlighting important evidence.

The text below follows the order of the Open Letter to make it easy to track down the underlying research.

This white paper was developed by ACR, which is solely responsible for its content. If you have questions, please direct them to <u>ACR@winrock.org</u>.

RESEARCH SUMMARY

"Net zero" is a pragmatic goal in line with the Paris Agreement.

The Paris Agreement set a <u>long-term temperature goal</u> of "well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees." To achieve this goal, the Parties aim to "achieve a balance between anthropogenic emissions by sources and removals by sinks of GHGs in the second half of the century."

At COP 26 in Glasgow, the Parties agreed that limiting global warming to 1.5 degrees C required reductions in emissions "to net zero around mid-century."

Article 6 of the Paris Agreement describes how countries can voluntarily cooperate to reach their climate targets. Article 6 provides the framework for countries to transfer mitigation outcomes generated from the reduction or removal of carbon emissions to help other countries meet their targets.

Article 6.2: Establishes the rulebook for countries to exchange mitigation outcomes bilaterally (Internationally Transferred Mitigation Outcomes – ITMOs) and to report and account for their transfer and use them towards their Nationally Determined Contributions (NDCs).

Article 6.4: Establishes a new United Nations Framework Convention on Climate Change (UNFCCC) mechanism for the validation, verification and issuance of high-quality carbon credits.

Learn more.



Companies that are already utilizing carbon credits are 1.8 times more likely to be decarbonizing year-over-year, a key to achieving net-zero emissions by 2050.

According to research by Ecosystem Marketplace's analysis of corporate disclosures to CDP by 7,415 organizations, companies engaging in the voluntary carbon market are 1.8 times more likely to be decarbonizing year-over-year.

In addition, their research finds:

- Companies engaged in the voluntary carbon market (VCM) outperform their peers in accelerated climate action. Fifty-nine percent of VCM buyers reported lower gross emissions year-on-year related to reduced emissions and/or renewable energy consumption, compared to 33 percent of companies not participating in the carbon markets.
- VCM buyers spent three times more on emissions reductions activities that the typical nonbuyer.

Learn more.

Yet even among committed companies only 18% are on track to achieve their targets, according to Accenture.

In November 2023, Accenture released new analysis showing that only 18% of companies were currently on track to reach net zero emissions in their operations by 2050.

In addition, the research found that 38% of companies "say they cannot make further investments in decarbonization in the current economic environment."

Accenture's research is based on work with The SmartCube, a business analytics firm, to collect data on the G2000.

Learn more.

Nature is essential for maintaining a thriving economy; 55% of global GDP depends on natural capital and ecosystem services.

In research from April 2023, PwC found that "55% of the world's GDP is exposed to material nature risk," which is equivalent to \$58 trillion of economic activity. This represents an increase of more than 30% from \$44 trillion that was "moderately or highly dependent on nature" in 2020.

Learn more.

In a recent survey of 500 business leaders, the top benefit of carbon markets was that they allow "immediate climate action while working to reduce emissions in the longer term."

In January 2023, Conservation International and the We Mean Business Coalition dug into results from a survey with 502 business executives.



One of the key findings (p.14): "When asked about the benefits of the voluntary carbon market—through which carbon credits are bought and sold—the top two responses were: (1) credits allow them to take immediate climate action while working to reduce emissions in the longer term (51%), and (2) credits are a cost-effective solution for making progress towards sustainability goals (49%)."

The research found that 38% of respondents' businesses were already using carbon credits and 51% said they were considering using them.

In addition, nearly 9 out of 10 respondents (89%) said carbon credits are important or very important, either to compensate for emissions that organizations are not yet able to eliminate, or to neutralize annual unabated emissions.

Learn more.

Buying carbon credits is efficient, lowering economy-wide costs of decarbonization and raising ambitions and impact, according to research from Environmental Defense Fund.

In a December 2019 economic analysis, Environmental Defense Fund found that cost savings from international trading of emissions could produce nearly double the climate ambition at the same overall cost, compared to countries complying with the Paris Agreement without international markets.

Learn more.

The EDF findings are supported by separate research from the University of Maryland and IETA from October 2021, which found that cooperative implementation of NDCs using Article 6 could substantially reduce the resources needed to achieve emissions reductions compared to achieving the same global outcome with all parties implementing their NDCs independently.

Specifically, they found that carbon markets could reduce mitigation costs by \$21 trillion between 2020 and 2050, driven by increases in carbon prices over time. In addition, countries stand to save \$250 billion per year in 2030 due to improved economic efficiency.

If these savings are reinvested into increased ambition, emissions mitigation could be more than doubled.

Learn more.



More than \$100 billion was invested in carbon markets in 2023, which is a record according to the World Bank.

In May 2024, the World Bank Group issued its "State and Trends of Carbon Pricing 2024" report. The report found that carbon pricing revenues in 2023 were \$104 billion, a record. In addition, 24% of global emissions are now covered by carbon taxes and emissions trading systems, with ETS's representing the bulk of carbon pricing revenues.

Learn more.

All climate philanthropy was estimated to be \$7.8 - 12.8 billion in 2022.

In a November 2023 report, Climateworks Foundation found that climate philanthropy was flat in 2022, estimated at \$7.8 to \$12.8 billion from individuals and foundations. While funding overall was flat, foundation funding grew 12% from 2021 to 2022.

Learn more.

To achieve net-zero emissions by 2050, more than \$3.5 trillion in additional average annual spending will be required, according to McKinsey.

In a January 2022 report, McKinsey found that the transformation of the global economy needed to achieve net-zero emissions by 2050 would \$9.2 trillion in annual average spending on physical assets, which is \$3.5 trillion more than today. As they note, "that increase is equivalent to half of global corporate profits and one-quarter of total tax revenue in 2020."

McKinsey further estimates that global spending on physical assets in the transition would amount to about \$275 trillion between 2021 and 2050, or about 7.5 percent of GDP annually on average. The biggest increase as a share of GDP would be between 2026 and 2030.

Learn more.

For most companies, scope 3 emissions account for more than 70% of their total emissions.

In June 2023, the World Economic Forum reported that, "scope 3 emissions usually account for more than 70% of a business's carbon footprint but aren't generally reported on ESG (environmental, social and governance) reports, shifting focus to this class is crucial in reaching climate targets."

The report also found that, according to the United Nations, the world's greenhouse gas (GHG) emissions are still set to be 10% higher in 2030 compared to 2010. As a result, it will be increasingly important to look beyond scope 1 and scope 2 emissions – which companies control directly – to also address emissions from their value chains (scope 3).

Learn more.



90% of employees engaged in their company's sustainability work say it enhances their job satisfaction because people want to work for responsible businesses.

In a 2023 report (p.15), Cloverly referenced research by the National Environmental Education Foundation that found, "nearly 90% of employees engaged in their company's sustainability work says it enhances their job satisfaction and overall feelings about the company."

The report also found that (p.12) "nearly 6 in 10 consumers are willing to change their purchasing habits to help reduce negative impact to the environment" and "two-thirds of global consumers also support carbon labeling on products."

Learn more.

8 of the 10 most valuable brands in the world already are using carbon credits or have pledged to do so.

In October 2023, Carbon Growth Partners and Bloomberg released, "Investing in Carbon Markets: Cleared for Takeoff," which highlighted that "8 of the world's 10 most valuable brands – who understand their customers intimately and protect their brands fiercely – already use carbon credits or have pledged to do so, including all of the top four."

The eight companies, in order of brand value, are Amazon, Apple, Google, Microsoft, Samsung, Verizon, Tesla, and TikTok.

Learn more.

All companies are likely to participate in carbon markets at some point in the future.

Several independent analyses support the point above.

In 2023, BloombergNEF released its report, "Long-Term Carbon Offsets Outlook 2023," which stated that, "companies will still need billions of offsets long term: Today's fluctuating demand is mostly classified as behavioral, meaning companies buy offsets to differentiate products or satisfy customers. It's more responsive to prices and criticism, and BloombergNEF expects behavioral demand to drop from 181MtCO2e in 2023 to zero in 2050. It will be replaced by fundamental demand as companies work toward net-zero goals, increasing to 1.1GtCO2e in 2030 and 5.4GtCO2e in 2050. This demand is less price elastic and takes over long term."

Learn more.

In January 2024, Wood Mackenzie released its "Carbon markets: 5 things to look for in 2024" report, which stated that "we also observe carbon pricing regimes extending to more sectors to drive decarbonization in other parts of the economic activities. More countries are targeting transport and fossil fuel upstream sectors for mandatory carbon pricing obligations. Increasing government-led initiatives will provide consistent carbon price signals to wider sectors, accelerating global transition."



The report added, "the <u>EU CBAM</u> set a precedent for other countries. The UK announced the implementation of the UK CBAM starting in 2027. There are also discussions in countries like the US and Australia. We expect to see other countries to implement a carbon border tax or raise their domestic carbon prices."

Learn more.

Carbon market integrity is converging on a clear definition.

This assertion is based on similarities between four separate integrity initiatives focused on carbon markets: the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the U.S. Government Voluntary Carbon Markets Joint Policy Statement and Principles, the Integrity Council for the Voluntary Carbon Market (ICVCM), and the Voluntary Carbon Markets Integrity Initiative (VCMI).

Across these initiatives, the following principles are shared:

- Additionality based on realistic and credible baselines
- Robust quantification of emissions reductions and removals
- Transparency, with publicly available information about crediting activities
- Permanence and reversal risk mitigation
- Net of leakage
- No double counting of credits
- No net environmental or social harm

More about each initiative can be found here:

- International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – Emissions Unit Eligibility Criteria
- U.S. Government Voluntary Carbon Markets Joint Policy Statement and Principles
- Integrity Council for the Voluntary Carbon Market Core Carbon Principles
- Voluntary Carbon Market Integrity Initiative Claims Code of Practice



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