Carbon Innovation for Business Impact

Accelerating climate solutions and private sector finance to make real change possible

NATURAL CAPITAL PARTNERS

Contents

Teak Afforestation, Mexico

Cover Photo: SELCO Solar Energy Access, India

Executive summary

Since the Paris Agreement was signed in 2016, the scale of corporate climate ambition is growing—and at an exponential rate. Businesses are seeking innovative solutions to achieve ambitious carbon neutrality and net zero goals.

We need even greater speed and scale to meet the Paris Agreement's target—a world in which average temperatures rise by no more than 2°C and ideally no further than 1.5°C. This requires all the tools available today along with new innovations to drive the global transformation of our economy.

What were considered 'innovations' not so long ago have become integral to climate action. In 2019, solar installations were almost 15 times higher than in 2010. For wind power, which started earlier, it was three to four times.[1] Carbon finance was one enabler of this progress, and it continues to be a highly effective tool.

Carbon innovation plays a critical role in closing the finance gap. It accelerates climate action by applying existing and new methodologies to make projects accessible to businesses as part of their sustainability strategies.

In this paper, we assess a series of current project types at four different stages of development for carbon markets—proven, emerging, high-potential, and experimental. For each of these project types, we address the role of carbon innovation to:

- drive practical and scalable growth of climate solutions overall.
- advance new opportunities and new methodologies to make more projects available and accessible.
- harness the value of private sector finance to create positive outcomes for business, the environment, and society.

Even the most ambitious businesses seek practical solutions to address urgent social and environmental challenges. We offer an approach for companies to make smart business decisions by evaluating key considerations, including

Efficient Cookstoves, Malawi

cost, availability, credit potential, co-benefits, time horizon, and communication of projects. By structuring a carbon finance portfolio of projects, they can achieve their goals while managing their own priorities and risk tolerance.

Any strategy should also consider the broader implications and the role of carbon finance to advance the Sustainable Development Goals. Each project and portfolio can address business requirements and add value with values: generating additional benefits to conserve nature, improve lives, provide natural sources of energy, protect biodiversity, reduce emissions, and so much more.

We outline the carbon credit lifecycle and the ways to create business value at each stage. We then describe the existing methodologies and how they deliver the highest levels of quality for programmes to offset—or compensate for—carbon emissions.

For more than 20 years, Natural Capital Partners has been at the forefront of the voluntary carbon market. We bring that experience to light in this paper as we look ahead to what comes next.

Introduction

Gas Distribution Leak Reduction, Bangladesh

How can we achieve our ambitions for a net zero future?

This critical question is the inspiration for this white paper on carbon innovation. We know what we need to do—deliver as many reductions in emissions now as possible and remove the residual to keep temperature rise below 1.5°C—and many, if not all, the solutions are available. So what's stopping us?

As global climate action intensifies, carbon finance has proven to be a highly effective tool to deliver action. For businesses seeking to align with the Paris Agreement and pursue carbon neutrality and net zero goals, offsetting unavoidable emissions directs funding to raise finance for projects where it's needed most:

- implementing large-scale renewable energy projects to reduce dependence on fossil fuels.
- enabling social entrepreneurs and nonprofit enterprises to grow and expand their work.
- empowering communities to adopt sustainable and climate-smart practices while finding new economic opportunities.
- protecting and restoring natural ecosystems as thriving carbon sinks and to prevent biodiversity loss.
- equipping companies to drive finance to carbon removals and avoidance and deliver on their climate goals.

At the project level, carbon finance builds on the premise that market-based incentives are necessary to shift from carbon-intensive activities toward low-carbon alternatives. In practice, this premise has strong supporting evidence. By the end of 2019, the market had achieved over 600 million tonnes of CO_2e in emission reductions or removals, equivalent to taking 130 million cars off the road for a year.[2]

In the process, carbon finance has accelerated sustainable development globally, advancing natural climate solutions, improving health and livelihoods through access to clean energy and more efficient household devices, and deploying new technologies. It has been a vehicle to reduce and mitigate our climate impact while enabling the communities most vulnerable to climate change and its effects to adapt and become more resilient.

The challenge turns to financing more solutions and driving impact at scale. The Taskforce on Scaling Voluntary Carbon Markets, for example, is calling on the need to grow the voluntary carbon market 15-fold by 2030 to align with a 1.5°C pathway.[3] Now, in this decisive decade for action, there is an imperative to drive investment in all the solutions available—from established to experimental—and to incentise new innovations.

This paper is about the meaningful ways carbon finance is accelerating innovation and the ways businesses can apply carbon finance to make a lasting positive impact. We aim to provide an overview and assessment of innovative climate solutions that are available through climate finance today—and those that show promise for the future. We approach these topics through the lens of business decision-makers who are seeking practical and scalable approaches to deliver on ambitious climate goals.

For more than two decades, carbon finance has been building up to this moment. The voluntary carbon market has pioneered methodologies and standards to ensure measurement and credibility and raise funding for critical projects. It has repeatedly demonstrated that it is effective and adaptable at making funding of new and emerging projects more widely available and accessible.

Carbon finance harnesses the essential elements of nature—renewable solar and wind energy, clean water, healthy forests, grasslands, and marine habitats—to restore and regenerate our world.

If you ask us, it's only natural.

30%

Fortune Global 500 companies that have delivered a significant climate milestone or are publicly committed to do so by 2030.

Natural Capital Partners, 2020, Response Required: How the Fortune Global 500 is delivering climate action and the urgent need for more of it

Advancing practical and scalable solutions


Improved Water Infrastructure, Sub-Saharan Africa

Defining the role of innovation in carbon finance

Carbon innovation accelerates climate action by applying existing and new methodologies to make the funding of projects accessible to businesses as part of their sustainability strategies. It is based on the recognition that emission reductions must have monetary value to drive change.

By pairing opportunities that deliver emissions reductions to credible methodologies that verify the integrity and quality of those reductions, carbon finance allows business to fund critical projects around the world.

Where opportunities and methodologies converge, they generally become more affordable, accessible, and scalable.

Projects at each stage also carry different risk profiles. In working with our clients, these are the primary considerations that shape the decision-making process:

Cost—The overall cost of a project will influence the price per tonne of carbon. Higher costs can be determined by the technology, the management and maintenance, and the location. More experimental technologies generally have higher startup and maintenance costs, driving up the price per tonne significantly, in some cases.

Availability—The availability of projects and project types will ideally grow steadily to accommodate increasing demand and mitigate price volatility.

Credit potential—Projects must go through third-party review to become registered under a credible standard. While some newer technologies may seem promising, there is no guarantee that they will meet all the criteria to generate carbon credits in the near term. Where methodologies do not yet exist, creating a methodology with a standards body is a prerequisite and can take time to develop.

Outcomes—Beyond carbon, many projects deliver critical sustainable development impacts, such as biodiversity conservation or support for improved health and livelihoods. There are methodologies to measure, report and verify these important benefits.

Time horizon—Companies can take immediate delivery of existing credits or buy forward credits that are expected to be validated, verified, and registered under an approved standard later.

Communication—It is important to effectively engage stakeholders—including customers, employees, investors, civil society, and supply chain partners. As sustainability becomes more central to corporate strategy, clear and credible communication enables more effective implementation of internal reductions and carbon offsetting programmes, both internally and externally. Connecting carbon finance to a company's mission and purpose is a way to build brand value and improve organisational alignment.

Yuanmou Wind Power, China

Structuring a carbon finance portfolio

Businesses can leverage various financing options to create a carbon credit portfolio in line with their requirements and risk tolerance. These three funding structures can be blended based on risk and reward potential and can be implemented alongside a direct reduction strategy.

Spot market

Projects depend on reliable revenue from carbon credits. These projects deliver certified emissions reductions and other sustainable development benefits while sustaining project partners and social entrepreneurs.

Forward purchase

Businesses can provide funding to emission reduction projects before the validation and verification of carbon credits is assured. The prospect of lower costs and more secure access to reductions must be weighed against greater risk, more complex contracting, and likely long-term commitment.

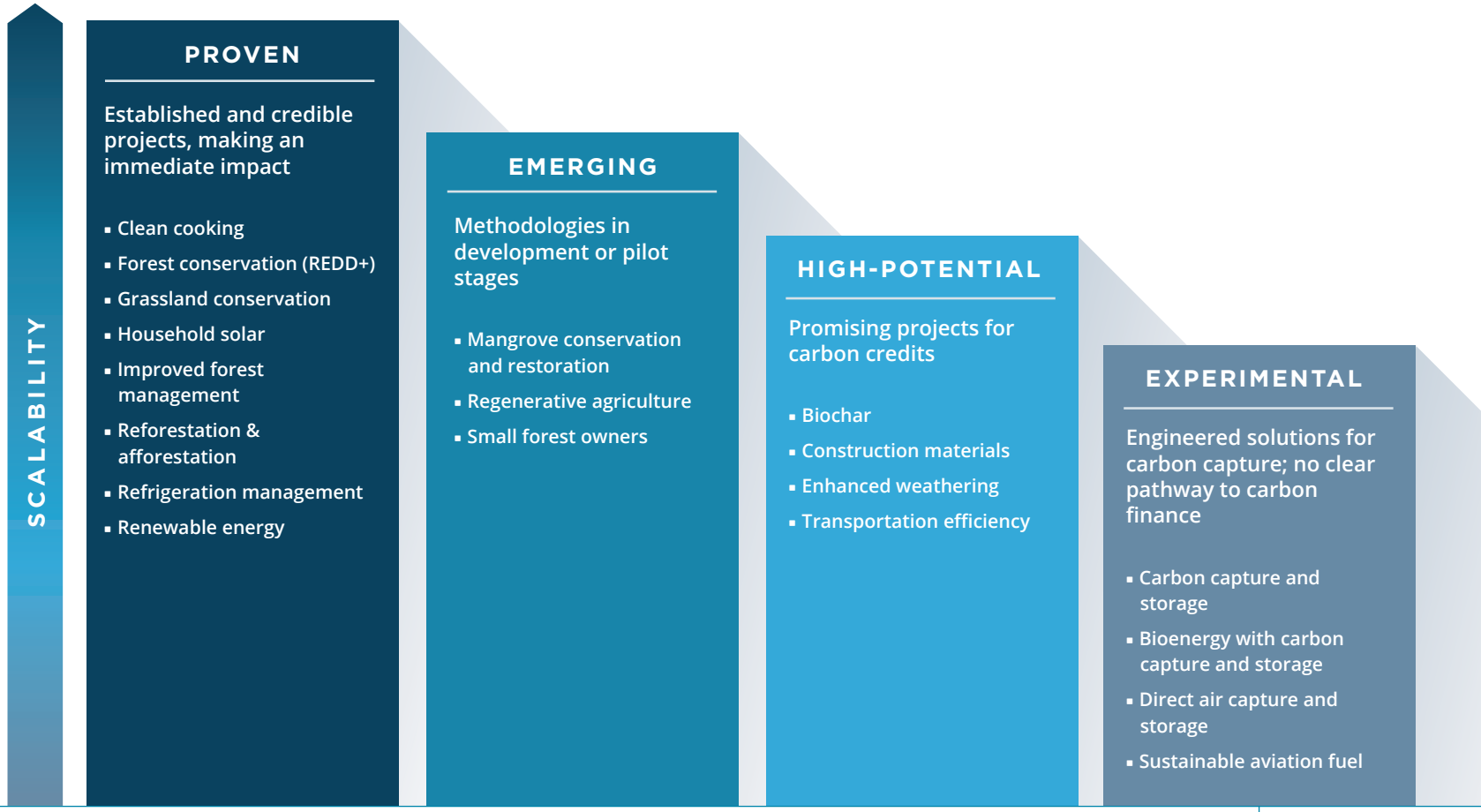
Project development

Up-front capital to finance initiatives at an early stage with the expectation that the project will generate credits in the future. The risk associated with these projects is highest, but they can be attractive to businesses seeking to break new ground in climate progress.

Evaluating carbon finance projects

Carbon finance projects can be organised into four stages of development based on the maturity of the opportunity and the maturity of the methodology that will be used to measure and verify its impact.
Our teams regularly scan for projects that drive the industry toward the greatest convergence of opportunities and methodologies.

On the pages that follow, we go into more detail on each category and project type.



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Proven methodologies

Projects delivering immediate results

Clean cooking—At least four billion people cook over open fires and lack access to clean, efficient, and affordable cooking energy. These open fires contribute to climate change through the use of fuelwood and can cause smoke-related health issues, primarily impacting women and children.

Carbon finance is a key source of funding for projects that deliver clean cookstoves. The projects provide modern cooking solutions, such as solar cookstoves and efficient cookstoves that burn less wood and redirect smoke out of homes.

Forest conservation (REDD+)—Deforestation is recognised as one of the largest causes of climate change and rates of forest loss is increasing. Scientists are calling for 30% of land to be protected to prevent the worst effects of climate change and biodiversity loss.

The Intergovernmental Panel on Climate Change (IPCC) reports: 'Reducing deforestation and forest degradation is a major strategy to reduce global greenhouse gas (GHG) emissions. The combination of reduced GHG emissions and biophysical effects results in a large climate mitigation effect, with benefits also at local level. Reduced deforestation preserves biodiversity and ecosystem services more efficiently and at lower costs than afforestation/reforestation.'[4]

REDD+ projects avoid the deforestation and degradation of some of our most valuable carbon stores. In addition, projects work with local communities to build sustainable livelihoods which value the standing forests and conserve and restore the rich biodiversity which supports a wide range of ecosystem services.

Grassland conservation—Grassland protection has the potential to withhold 3.35–4.25 gigatonnes of CO_2e between now and 2050,[5] more than the annual emissions of India.[6] Throughout the Great Plains of North America—a vast expanse between the Rocky Mountains and the Mississippi River—efforts are underway to restore and manage these prairies, working with farmers, conservation organisations, and others.

Household solar—Projects to generate energy for off-grid households have several positive social impacts in addition to carbon emissions reductions. These projects are critical to ensuring our transformation to a sustainable low-carbon economy is global. They often benefit communities most impacted by climate change yet least responsible.

Improved forest management—Improved forest management could be applied to some two billion hectares of wood-production forest worldwide, an area twice the size of the United States.[7] According to the IPCC,

Danjiang River Solar Cookers, China

Community Chlorofluorocarbons Destruction, Ghana

improved forest management is one of only nine response options based on land management with medium to large benefits to address mitigation, adaptation, desertification, land degradation, and food security.[8]

Reforestation & afforestation—Planting trees could remove more than 100 billion tonnes of CO_2 from the atmosphere by 2050.[9] Reforestation and afforestation projects help protect against hurricane and flood damage, controls soil and nutrient run-off, improves the water quality, and restores vital habitat to protect biodiversity.

Each project considers the need to restore native species, improve land management practices, and create economic opportunities in forestry.

> Highlighting the importance of reforestation and afforestation, the World Economic Forum launched the 1t.org initiative to plant one trillion trees by 2030. Working with clients and project partners, Natural Capital Partners has joined 1t.org U.S. Chapter with a pledge to plant one million mangroves by 2030.

Refrigeration management—As the planet warms, the need for refrigeration of homes, businesses, and vehicles will only increase. The replacement of hydrofluorocarbons, which are potent greenhouse gases, with natural alternatives,[10] including carbon dioxide, hydrocarbons, and ammonia, have zero or near-zero global warming potential.

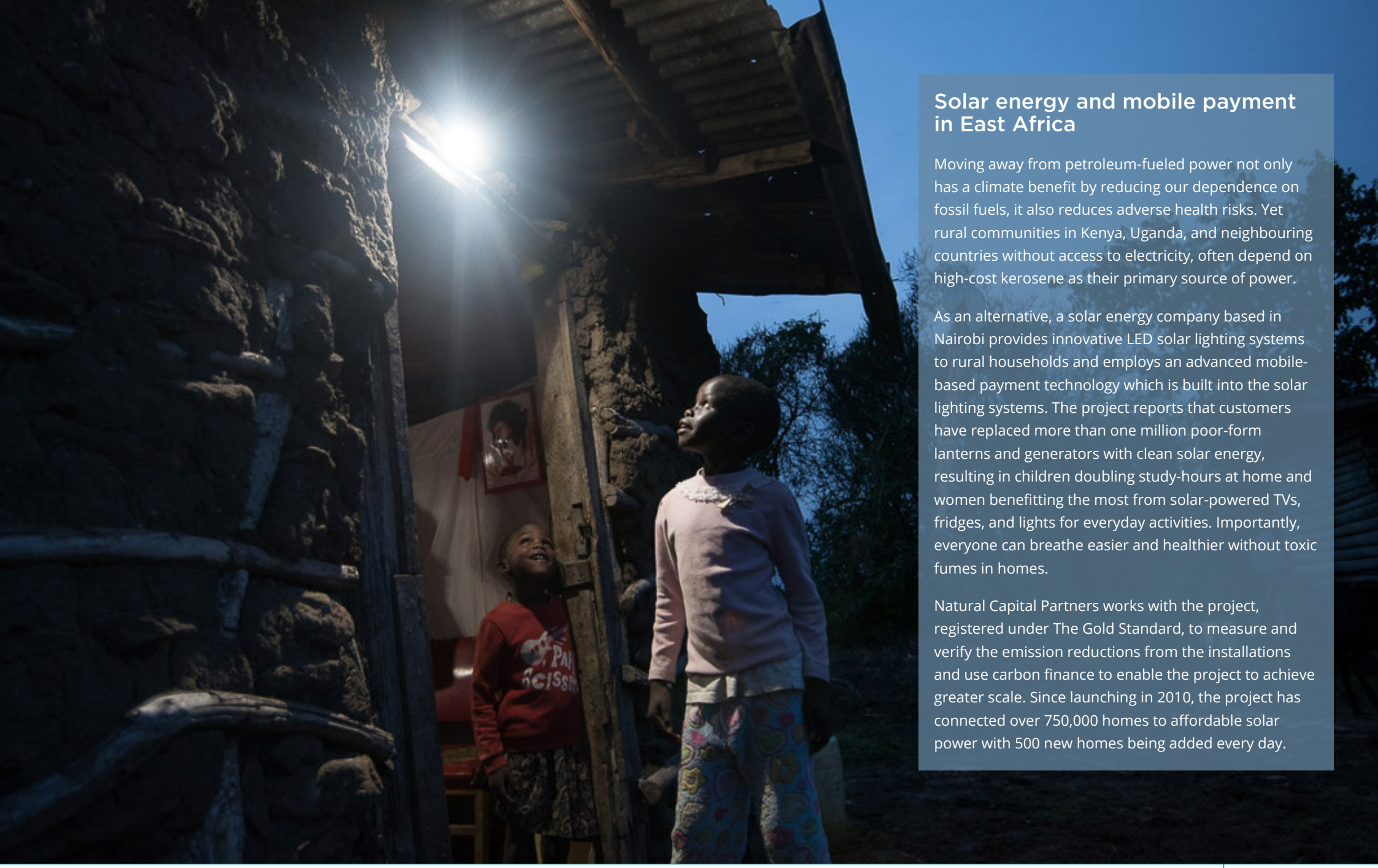
Renewable energy—Renewable energy accounts for roughly a quarter of global electricity generation.[11]

As a true success story, the cost of renewables is approaching cost parity with non-renewable energy sources, making the additionality of carbon credits for renewable projects in developed economies less critical. This illustrates the value of carbon finance to support technologies as they become independently commercially viable. Carbon standards are now only accepting new renewable energy projects from developing countries in recognition of this evolution.

Preserving grasslands in the Great Plains

Home to swift foxes, ferruginous hawks, burrowing owls, this project in the U.S. state of Colorado, is a recipient of the USDA's Natural Resource Conservation Service Innovation Grant. The project's goal is to create financial incentives for conserving valuable grasslands through payments for belowground soil carbon.

Developed in conjunction with Environmental Defense Fund and registered under the Climate Action Reserve, it is located on two properties in southeast Colorado covering approximately 9,300 hectares (23,000 acres). Southern Plains Land Trust, a nonprofit organisation that works to preserve the shortgrass prairie ecosystems of the Great Plains, uses the carbon finance income to put toward further land preservation.



Solar energy and mobile payment in East Africa

Moving away from petroleum-fueled power not only has a climate benefit by reducing our dependence on fossil fuels, it also reduces adverse health risks. Yet rural communities in Kenya, Uganda, and neighbouring countries without access to electricity, often depend on high-cost kerosene as their primary source of power.

As an alternative, a solar energy company based in Nairobi provides innovative LED solar lighting systems to rural households and employs an advanced mobile-based payment technology which is built into the solar lighting systems. The project reports that customers have replaced more than one million poor-form lanterns and generators with clean solar energy, resulting in children doubling study-hours at home and women benefitting the most from solar-powered TVs, fridges, and lights for everyday activities. Importantly, everyone can breathe easier and healthier without toxic fumes in homes.

Natural Capital Partners works with the project, registered under The Gold Standard, to measure and verify the emission reductions from the installations and use carbon finance to enable the project to achieve greater scale. Since launching in 2010, the project has connected over 750,000 homes to affordable solar power with 500 new homes being added every day.

Emerging methodologies

Projects advancing early-stage methodologies

Mangrove conservation and restoration—Mangroves can store four times more carbon than a rainforest, but globally more than 35% have already been deforested. A limited number of projects are currently registered under the Verified Carbon Standard REDD+ Methodology Framework,[12] and Natural Capital Partners is working with the Verra Blue Carbon Working Group[13] to support the development of a new blue carbon methodology. The working group is exploring coastal wetland restoration and conservation activities and developing recommendations for how standards and their supporting methodologies and tools could unlock carbon finance opportunities.

Through our Million Mangroves initiative, we are scaling up mangrove conservation and restoration projects in Africa, Asia, and Latin America.

Regenerative agriculture—More sustainable farming practices ensure soil health and store carbon in the soil. Verra's Agricultural Land Management Working Group[14] is currently exploring opportunities to generate carbon credits through agricultural mitigation techniques. So far, two sustainable agricultural land management projects have been registered, one in India and one in Kenya.

Natural Capital Partners is currently piloting a project in India that aims to improve the livelihoods of small and marginalised farmers by restoring more than 4,400 hectares (10,900 acres) of degraded agricultural lands—about the size of New York's Central Park and London's Hyde Park combined—using water and soil carbon conservation techniques and adopting sustainable agricultural land management practices. The project is expected to store 6-7 tCO_2e per hectare annually and provide multiple co-benefits to thousands of rural farmers, including food and clean water.

Small forest owners—Forest carbon projects traditionally require several thousand acres to be economically viable. This has left out small landowners in the United States, which as a group own more than 60% of the country's forestland. The Family Forest Carbon Programme and the CORE Carbon Programme are two initiatives that are working with Verra and the American Carbon Registry to provide small landowners with access to carbon revenues to pay for sustainable forest management practices on their lands.


Mississippi Valley Reforestation, USA ©GreenTrees

Applying best practices from carbon markets to the plastic pollution crisis

More than 380 million tonnes of plastic are generated every year,[15] and it is estimated that about six per cent of global oil consumption is used to make plastic.[16] While the voluntary carbon market is focused on reducing carbon emissions, we must also consider the plastic pollution crisis and the conservation of all our natural resources. A new Plastic Waste Reduction Standard developed by Verra,[17] the 3R Initiative, and a coalition of industry partners, including Natural Capital Partners, is in the early stages of accounting for waste recovery and recycling projects.

Working with Seven Clean Seas, an organisation that has been investing in ocean and river clean-up operations in Indonesia since 2018, Natural Capital Partners is piloting the Plastic Waste Reduction Standard to ensure it delivers the highest quality approach to measuring the impact of plastic waste collection projects.

Conserving Mexico's Natural Places

As part of our Million Mangroves initiative, we are working in Mexico to protect and restore mangrove trees in Laguna de Terminos, a biodiversity hotspot along the Gulf Coast that is home to more than 1,500 native species of flora and fauna. The lagoon is also an important oasis for migratory birds. However, the mangroves have been depleted due to human activities, such as fishing and development.

Working with a leading mangrove scientist and a local cooperative, we are enabling the conservation and restoration of mangroves in the area. The project is already leading to healthier mangrove forests, improving water quality, restoring fisheries, reducing damage from severe storms, and creating new jobs in conservation.

High-potential technologies

Truck Stop Electrification, USA

Promising project types could broaden opportunities for carbon offsetting

Biochar—Biochar is charcoal generated from the decomposition of biomass. It can be used to enrich and store carbon in soil, making it beneficial for farming and soil health. Recognising the potential, the American Carbon Registry conducted a review to assess a possible methodology, concluding 'the methodology should not be accepted at this time'.[18]

In late 2020, Verra launched an effort to develop a biochar GHG accounting method under the VCS Programme. The results of this effort should be released in the latter half of 2021 with a published biochar methodology.[19]

Biochar as a carbon finance solution is its infancy, but biochar has the potential to be a very durable solution, able to store carbon for many centuries. A big challenge to developing a reliable methodology is uncertainty around the impacts associated with different feedstocks used to create it.

Material efficiency—The production of materials accounts for one quarter of global GHG emissions. Material efficiency in construction through methods including CO_2-enhanced concrete and timber construction, could reduce lifecycle emissions from homes and buildings by 35-40% among G7 countries and by 20-30% in India and China.[20] Generating carbon credits from such projects could be possible in the future.

Enhanced weathering—In natural systems, over the course of millions of years, the weathering of rocks triggers the breakdown of minerals, which in turn removes CO_2 and stores it in the sediment. Enhanced rock weathering is a method to accelerate this process, generating emissions removals while also improving soil health.[21]

Transportation efficiency—Improvements in freight transport,[22] shipping, and other forms of transportation could create a market for carbon credits, though these efficiency technologies are not yet under consideration for a standard.

Experimental technologies


Pangalengan Geothermal, Indonesia

Exploring solutions for the future

Much of our ambition today is grounded in the understanding that we don't have all the solutions 'shovel ready'. We require innovation in its broadest sense to meet our climate goals, protect and restore our planet, and increase economic vitality and prosperity.

Currently, these experimental technologies show promise for reducing and removing carbon, but they are generally not being considered under current standards.

While it is important to develop and implement new technologies in the transition to a net zero global economy, not all technologies are, or will be, compatible with the voluntary carbon market. Before a technology can be considered, it must demonstrate proof of concept and undergo review by credible standards to ensure it meets quality standards and established criteria, such as permanence and additionality, while also avoiding any unintended consequences. Even then, the circumstances do not always allow for a perfect pairing.

While carbon finance can be a highly effective way to enable the development and availability of new project types and innovations, it is not always suited for such early-stage technologies where proof, capacity, costs, and time frames are still to be defined.

Carbon capture and storage (CCS)—Engineered solutions hold much promise, and the idea of drawing carbon from the atmosphere and storing it needs to be explored and tested as part of the solution to climate change. CCS projects are generally connected to fossil fuel power plants and divert emissions to be stored underground. As of December 2020, the Global CCS Institute identified 26 commercial facilities in operation with the capacity to capture about 40 million tCO_2e annually.[23]

Bioenergy with carbon capture and storage, or BECCS, work in a similar fashion, except with bioenergy instead of fossil fuels.

Direct air capture and storage, or DACS, pumps CO_2 underground and can be smaller in scale, though it is highly energy intensive and still very expensive. Still in the prototype stage, The International Energy Administration has identified 15 DACS plants operating worldwide, able to capture more than 9,000 tCO_2 per year.[24]

> *In an open RFP process, Microsoft assessed carbon capture and storage to be tonne-for-tonne 50 times higher in cost compared to natural climate solutions. At that cost, it will take time for them to be viable at scale and before they can be assessed for a credible methodology.*[25]

Sustainable aviation fuel—Blending biofuels into aviation fuel can drive down emissions, but it is a nascent area that remains extremely expensive and is complicated by the potential for double- and triple-counting reductions. Another issue is reconciling between pure greenhouse gas emissions and the greenhouse gas impact of air travel, which is currently taken as twice the tCO2, and the variances in emissions impact at various altitudes.

Adding value with values

Positive impacts beyond climate

Carbon finance projects not only address climate change, the vast majority contribute to additional UN Sustainable Development Goals (SDGs). Innovative approaches play a critical role in creating shared value by driving benefits for business, people, and nature.

Benefits for business—Climate action is a determining factor in driving competitive advantage, meeting customer expectations, ensuring resilient supply chains, and retaining the best talent. Companies that can effectively communicate their strategy to stakeholders are able to differentiate their brand and compete in the marketplace.

Benefits for people and nature—Carbon finance projects can be measured against the Sustainable Development Goals to determine the co-benefits associated with a particular project. Climate action should not be considered in isolation, but as part of a holistic approach to a planet that thrives and communities that are healthy and prosperous. Projects can provide multiple co-benefits, including safe drinking water, reduced air pollution, biodiversity protection, and clean electricity for small businesses, with carbon finance enabling the private sector to drive that global transformation to a low-carbon economy.

The area of each of the 17 SDGs in this graphic is based on an analysis of 75 of our most popular projects. All 75 projects impact SDG 13, Climate Action, and the other SDGs are proportional to that.

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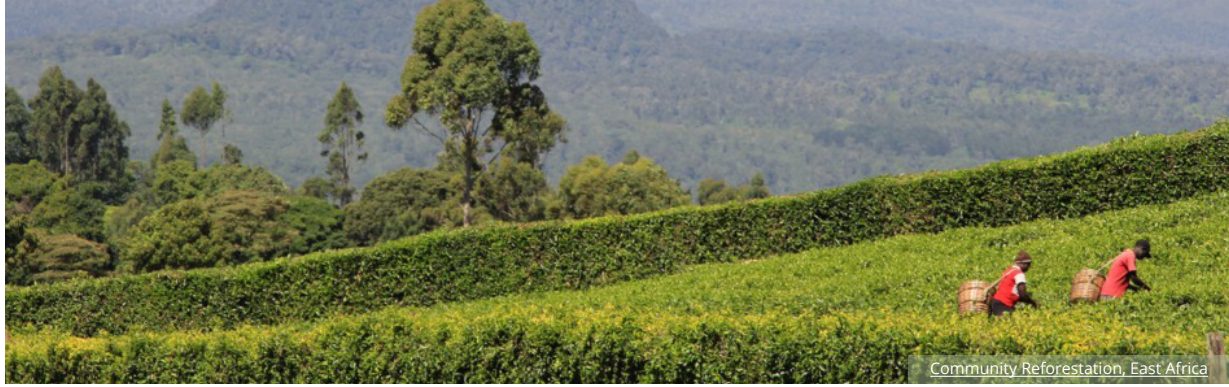
A Sanctuary in Indonesia for People and Nature

Rimba Raya, a 65,000-hectare peat swamp forest in Central Kalimantan, Indonesia, is home to more than 120 species of mammals, 300 species of birds, and 180 kinds of plants and trees. It is also home to communities living in nine remote villages.

In 2020, it became the first project registered to Verra's SD VISta while demonstrating that it is advancing all 17 SDGs.[26] In addition to forest and habitat conservation, programmes in surrounding villages provide education, employment, and access to healthcare. Beyond carbon finance, support from our corporate clients, has catalysed mangrove restoration, a floating health clinic, and community empowerment.

Delivering quality carbon credits


Community Reforestation, East Africa

We are engaged in the carbon finance lifecycle of projects from beginning to end to deliver high-quality, high-impact results for our clients.

This diagram illustrates the carbon credit lifecycle and the implications for businesses pursuing carbon finance solutions.

Carbon credit lifecycle	Role of Natural Capital Partners	Benefits to our clients
Methodology development	We participate in working groups with standards bodies to represent our clients' interests.	Our clients have an expert voice advocating for emission reduction and removal projects firmly grounded in science and quality criteria.
Project development, validation, registration	We work closely with project partners who understand the local context and work with community groups to develop a project plan that is sustainable over the long term.	Clients can be confident about the integrity of the project and the involvement and agreement of local stakeholders.
Project implementation and monitoring	Working with partners on the ground, we offer projects that are delivered to the highest standards with ongoing monitoring, reporting and verification (MRV) of their impacts.	Carbon finance projects are underpinned by a robust process of MRV to ensure quality. Additional impacts and outcomes can be measured to align with specific client interests.
Verification and offset credit issuance	Annual reviews of projects and partners to ensure they are delivering prescribed outcomes.	Client can be assured of ongoing quality and credibility to support their claims and climate action.
Offset credit transfer and retirement	Ensure that each unique instrument is appropriately retired. Annual third-party audits ensure compliance with the International Carbon Reduction and Offset Alliance (ICROA) Code of Best Practice.	Clients can be assured that we will manage transactions through our audited internal systems and independent registries, adhering to best practices, and preventing double-counting.

Ensuring credible standards

Credits are assessed and validated based on six criteria:

Additional—An emissions reduction or removal project would not occur without the availability of carbon finance.

Permanent—Carbon credits represent permanent emission reductions and removals.

Independently verified—All emission reductions and removals are verified by an independent and accredited third-party verifier.

Unique—No more than one carbon credit can be associated with a single emission reduction or removal.

Real—Emission reductions and removals are proven to have genuinely taken place.

Measurable—All emission reductions and removals are quantifiable, using recognised methodologies and measurement tools, including adjustments for uncertainty and leakage.

Innovation in standards and methodologies

Carbon credits must be validated, verified, and registered under an approved standard to ensure quality. ICROA manages the Code of Best Practice to ensure the highest levels of quality in carbon offset programmes. The current standards that have been accepted by the ICROA Code because of their robust processes include:

Verified Carbon Standard

Climate Action Reserve

American Carbon Registry

Clean Development Mechanism

Gold Standard

Australian Government
Department of the Environment and Energy

Emissions Reduction Fund of the Australian Government

Woodland Carbon CO_2de

UK Woodland Carbon Code

An innovative approach to growing resilient woodlands in the United Kingdom

The Woodland Carbon Code is the only voluntary standard of its kind, meeting the UK Government's Forest Standard. UK forest creation projects are co-funded with Forestry Commission grant aid which is insufficient to incentivise landowners to plant—hence the need for additional funding to make the projects happen.

After a project is registered with the Woodland Carbon Code, it undergoes validation by a third party accredited by the UK Accreditation Service.

Pending Issuance Units are created as part of this validation process, based on estimated tree growth and carbon removals. These are automatically converted into Woodland Carbon Units once the trees have grown and delivered the carbon removals.

Pending Issuance Units do not represent guaranteed reductions and cannot be used to report against UK-based emissions until verified and converted to Woodland Carbon Units.

The Forestry Commission guarantees quality in the areas of woodland management and environmental impact assessment, plus an inspection regime after planting and once the forest is five years old, ensuring a legacy of social and biodiversity benefits.

Conclusion

In this critical decade and beyond, the role of carbon finance should not be underestimated. Carbon finance enables business to drive progress and make a positive impact, accelerating the transformation to a net zero economy.

To achieve our collective interest in keeping global warming below 1.5°C, innovation is key. Investment in new and creative carbon finance projects today will unleash practical and scalable solutions, and unlock new opportunities and methodologies to avoid, reduce, and remove emissions.

This white paper is designed to offer practical approaches for businesses to maximise their carbon offsetting programme. First, by evaluating key business considerations, a company can identify an appropriate profile of risk and reward. A business can then model a blended portfolio around three funding structures as a function of their emission reduction strategy.

The white paper provides an overview of a series of existing project types and how they can be incorporated into a project portfolio, based on their maturity and the corresponding status of applicable methodologies. Though not exhaustive, the projects illustrate how carbon finance can be applied to drive further innovation and impact at scale to achieve business impact. Finally, with consideration of broader Sustainable Development Goals and credible methodologies, a business is able to incorporate carbon offsetting into an effective climate strategy.

From proven to experimental, carbon finance projects conserve nature, improve lives, produce reliable clean energy, and protect biodiversity. But carbon finance alone will not solve all the challenges we face. It takes all the solutions available—from those available today to those that are yet to be invented. As these solutions emerge, carbon finance can be a catalyst, galvanising climate solutions and private sector action.

Darkwoods Forest Conservation, Canada

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About Natural Capital Partners

With more than 300 clients, including Microsoft, MetLife, Logitech, PwC, Sky, and UPS, Natural Capital Partners is harnessing the power of business to create a more sustainable world. Through a global network of projects in over 30 countries, the company delivers the highest quality solutions which make real change possible: reducing carbon emissions, generating renewable energy, building resilience in supply chains, conserving forests and biodiversity, and improving health and livelihoods.

Natural Capital Partners was founded in 1997 and has offices in North and South America, Asia, and Europe. Since it began, the company has worked with more than 500 projects in 75 countries on behalf of its clients. It has been recognised as Environmental Finance Best Offset Retailer award for the past ten years and Best Advisory Service for the last four.

In May 2021 Natural Capital Partners merged with ClimateCare. The combined group will use its access to capital, global reach and longstanding industry and project development expertise, to drive further innovative solutions and partner with its clients to deliver on their ambitious climate and net zero goals.

Contact us

If you would like to find out more about innovative carbon finance solutions, or to discuss your environmental goals, please contact us:

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