Building a voluntary carbon offsets market: Supporting Net-Zero Ambition
Context

Delivering a global emission backdrop aligned with limiting further temperature rises means enabling a net-zero economy – one where emissions from man-made activity are balanced by both man-made and natural carbon capture mechanisms. Protecting and scaling up nature based carbon solutions by creating a market for them is crucial to creating this climate neutral environment. As corporates are raising ambition on their own net-zero efforts, a voluntary carbon offset market is increasingly a necessity.

This paper outlines the current state of the voluntary carbon offset market and provides recommendations for developing the market.

Questions this paper addresses

1. What is the role of Nature-Based Solutions to achieve the net-zero emission outcome?

2. What is the current state of the voluntary carbon offset market and the challenges?

3. How can finance enable Nature-Based Solutions and carbon offsets?

4. What are the enablers required to scale the market?

Executive summary

Scaling up a credible voluntary carbon offset market using Nature-Based Solutions (NBS) is a core foundation for achieving a net-zero emissions outcome by 2050. At USD0.6bn, the voluntary market represents just 0.01% of the compliance credit market. Meanwhile, demand is beginning to take off, with corporates in particular becoming more vocal about climate ambition and net-zero roadmaps.

Nature-Based Solutions offer a way to build resilience to the consequences of warmer temperatures whilst helping to limit further rises by acting as carbon sinks. The finance sector can help by implementing the following actions.

- Create liquidity via a common market mechanism that pulls together the different trading mechanisms to create a ‘one stop shop’ for consumers, corporates and institutional investors
- Create reporting principles for NBS impact that replicate the Green Bond Principles format and include standards and a kitemark to provide guidelines, transparency and disclosure
- Create global investment funds and platforms that provide scale for institutional investor and corporate projects
- Incentivise product innovation based on NBS standards so that the financial products respond to demand from different industries and investors

The demand for carbon offsets is set to increase as individuals, corporates and investors seek to compliment absolute emission reduction activities with projects that enable them to address residual emissions. The finance industry is vital to facilitate and promote scale up of offsets.
1. The role of Nature-Based Solutions in delivering a net-zero emissions outcome

Current scientific thinking from the Intergovernmental Panel on Climate Change shows that both rapidly reducing emissions and at the same time scaling up carbon sinks, ensuring climate neutral economic activity, is necessary for limiting temperature rises\(^2\). The aim is to achieve a net-zero emissions backdrop globally by 2050, by balancing the sources of emissions with activities that absorb carbon, known as carbon sinks. In 2018 the special report on the impact of 1.5°C from the IPCC translates this aim into removing between 100bn and 1trillion tonnes of CO\(_2\) over the course of this century. Putting this into context, it equates to around 3 times total global 2019 annual energy-related emissions.

Work from the Energy Transition Commission (ETC) estimates that 7-8bn tonnes of CO\(_2\) per annum, equivalent to the total energy related emissions of US and India combined in 2019, needs to be captured and sequestered in carbon-based products, underground storage, or natural carbon sinks by 2040\(^3\), while an article in Nature Journal estimates the cost of inaction at USD400 in social costs per tonne of CO\(_2\) emitted\(^4\).

Using decarbonisation solutions to cut emissions will not be implemented fast enough to keep temperature rises under 1.5°C on their own. The core solution to address climate change is very well known globally – it is to become more energy efficient and decarbonise the energy system. One of the biggest challenges to this is the decarbonisation roadmap for energy intensive and industrial process sectors. According to the ETC, the so-called hard-to-abate sectors, including steel, cement, shipping and aviation, are responsible for 30% of annual total carbon emissions. While these sectors are likely to fall into regulatory trading mechanisms in different regions, a voluntary market helps to offset for companies and in countries not covered by a compliance trading framework. Reducing CO\(_2\) emissions is vital but not sufficient to reach a 1.5-degree pathway\(^5\). Removing additional CO\(_2\) from the atmosphere comes from man-made and Nature-Based Solutions (NBS).

At the same time, as temperatures rise, the physical impacts – such as droughts and floods, will be more widely felt. Nature is a key means to build resilience to these factors going forward. Natural resilience is closely linked to country ability to adapt to warmer temperatures.

NBS are actions to protect, sustainably manage and restore natural and modified ecosystems in ways to provide human well-being and biodiversity benefits\(^6\). For example, the restoration of forests, grasslands and wetlands allow nature to absorb more CO\(_2\) emissions from the atmosphere. NBS has the potential to tackle both climate mitigation and support human adaptation to climate change at relatively low cost whilst delivering multiple additional benefits\(^7\).

About one-fourth of global greenhouse gas emissions due to human activities over the past decade come from agriculture, forestry and land-use change. At the same time, about an equal amount of CO\(_2\) is absorbed by land “carbon sinks” such as trees and soil globally. However, deforestation during land-use change\(^8\) means that these carbon sinks are fragile and could easily be turned into carbon sources. WWF estimate an annual investment requirement of USD300 to USD400bn\(^9\) for ecosystems alone. They estimate current annual investment of USD52bn, a significant gap.

Corporates are increasingly signalling a commitment to negative emissions and using carbon offsets to deliver a net-zero outcome. There is increasing momentum behind company and sector commitments to decarbonisation, setting climate goals and pathways to net-zero. This is coming from a cross section of sectors, as set out below. Research shows one-quarter of Fortune 500 companies committed to be carbon neutral by 2030\(^10\). To achieve these goals, it is assumed that some emissions reductions will be achieved by buying “offsets” which finance land use changes (such as reforestation) reducing emissions. In addition to offsetting absolute emissions, some corporates have started to adopt a negative emissions approach.

- In December 2019, Drax\(^11\) set the world-first ambition to become carbon negative by 2030, meaning they will remove more CO\(_2\) from the atmosphere than they produce throughout their operations. Initiatives include piloting carbon capture of a tonne of CO\(_2\) every day at its power station and using sustainable biomass for energy generation. In the first half of 2019, 94% of the power produced by Drax Power Station in North Yorkshire, England, was renewable – resulting in carbon savings of over 80% compared with the previous coal fired power operating model.

---

1 Intergovernmental Panel on Climate Change; Summary for Policy Makers of IPCC special report on global warming of 1.5°C approved by governments, October 2018
2 Intergovernmental Panel on Climate Change; Fifth Assessment Report - The Physical Science Basis, 2013
8 Ibid.
Shell’s approach\textsuperscript{12} to achieve net-zero energy emissions by 2050 includes improving internal operations energy efficiency; selling cleaner-burning natural gas; generating electricity from solar and wind; providing lower-carbon fuels such as biofuels and hydrogen and supporting NBS by i) working with the Dutch National Forestry Department to plant 5m trees over 12 years; ii) working with Land Life Company on 300-hectare reforestation project in Spain.

Apple\textsuperscript{13} announced in July 2020 its commitment to be 100% carbon neutral for its supply chain and products by 2030. This is achieved through product and process innovations, energy efficiency, renewable energy. Apple is also investing in forests and other nature-based solutions globally, for example through partnering with Conservation International on mangrove ecosystem projects.

Microsoft\textsuperscript{14} accesses carbon offset community projects with a set of criteria including eligible standards, technologies and due diligence, prioritising projects that are approved under the International Carbon Reduction and Offset Alliance (ICROA) Code of Best Practice.

The EU intends to achieve net-zero by balancing the sources of emissions such as fossil fuel combustion, with “removals by natural or other sinks” such as forest, soils, agricultural lands and wetlands, as well as carbon removal technologies.

Sector initiatives in consumer facing industries are appearing. For example, over 30 IATA\textsuperscript{15} member airlines (The International Air Transport Association) have introduced an offset program either integrated into their web-sales engines or to connect customers to a third party offset provider. The program has a standardised process allowing airlines to introduce credible and independently validated offset programs.

Essentially, climate change is a product of market failure. Global warming is a negative externality associated with the greenhouse gas emissions that have not been priced at source. Pricing carbon therefore is a way to steer behaviour towards cleaner activities. Compliance mechanisms such as taxes and trading systems capturing industrial companies are ways to implement pricing at the source of emissions.

Carbon credits can also be used on a voluntary basis to offset residual emissions that cannot be reduced by efficiency or process changes. The carbon offset market thus operates under two markets - compliance and voluntary. Compliance Carbon Markets\textsuperscript{16} are marketplaces through which companies obtain and surrender emissions permits or offsets in order to meet predetermined targets and is highly regulated, whereas voluntary carbon markets are not regulated. The Voluntary Carbon Markets are driven by companies and individuals that take responsibility for offsetting their own emissions.

2. What is the current state of the voluntary carbon offset market and the challenges?

The global carbon voluntary offset market tripled to reach just USD0.6bn in 2019. This compares with the 2019 Global carbon markets growth of 34% to hit USD215.1bn in value, according to analysts at Refinitiv, mainly due to EU Emissions Trading Scheme (EU ETS) carbon price rise. In 2018, 94.8m tonnes CO₂e of carbon emissions were offset, to take the cumulative total since 2005 to 437.1m tonnes CO₂e.

Berenberg Bank estimate the addressable market size at USD200bn by 2050. The average price of voluntary carbon offsets has varied significantly historically, peaking in 2008 at USD7.3/tonne of CO₂e before dropping to USD3.01/tonne of CO₂e in 2018. Prices depend on the type and quality of projects, for example forestry and rarer types of projects may cost more due to shorter supply.

Many companies are cutting absolute carbon emissions, but an increasing number are also financing emission reduction projects around the world by buying carbon credits to compensate for unavoidable emissions. This carbon offsetting practice refers to tradable units of verified emissions reductions in the mandatory and voluntary markets, achieved by projects like carbon capture, utilisation and storage or reforestation projects, mangroves, technology or geocengineering and agriculture.

Currently, there are five key ways to source or produce carbon offsets: direct projects, insetting, purchasing credits via a broker, sourcing voluntary offsets via a market and investing through a fund.

Companies are investing directly in carbon offset projects such as reforestation projects, mangroves, technology or geocengineering and agriculture help to cut emissions and support technology transfer, create jobs and educational opportunities, bring socio-economic and environmental benefits to communities. For example, The African Forest Landscape Restoration Initiative (AFR100) is a country-led effort to bring 100 million hectares of deforested and degraded landscapes across Africa into restoration by 2030. This can be ring-fenced as a project in a different location to activities.

Alongside carbon offsetting, carbon insetting is a relatively recent concept which refers to companies partnering on climate projects that result in emissions avoidance within the supply chain. In this case, rather than a company purchasing a generic carbon credit to offset any remaining emissions, companies work within their sphere of influence, for example the supply chain, to partner on projects that create a Nature-Based Solutions directly related to the local community. Insetting produces a co-benefit to the company rather than purely buying credits, since it embeds resilience to the business model and license to operate. These can be comprehensive projects, for instance, Michelin invested in rubber plantations in Indonesia and Borneo under its “Sustainable Natural Rubber Policy”.

Carbon brokers have emerged to connect wholesale buyers and sellers together and are now used for over 20% of the recorded transactions for voluntary and compliance carbon offsets. In the compliance and voluntary markets, they help facilitate over-the-counter transactions, identify investments or partnership opportunities and strategic partnerships in exchange for commission.

Proposed projects may be at different level of development, different geographies, bearing different kind of certification, to meet the various demands, ranging from Clean Hydropower Education in Vietnam to bush fire prevention in Australia, to Forest Conservation in Congo. As brokers have a large portfolio of projects, they can also offer aggregative propositions. Voluntary Carbon credit brokers do not need to be licensed by a regulatory authority unlike other commodities.

In the UK, the company Climate Care gives consumers an option to counter their carbon emissions through purchasing carbon offsets. Distributed by retailers such as Quest Environment Development Limited or Heuga Carpet Tiles, this option supports retailers’ green credentials. The offsets are issued from forestry schemes in developing countries. In Australia, the 2000 “Bush for greenhouse” campaign involved a broker securing investment from private companies and channelling funds to revegetation projects that maintain a desired carbon pool. Australian Greenhouse Office acted as the certifier.

There are also several market places to purchase voluntary credits, which are less developed than for compliance credits. These projects are global and there are more projects available in emerging markets than in developed markets. WWF produced the Bankable Nature Solutions report\(^\text{23}\) in 2020 providing blueprints on bankable projects for companies and individuals to identify and finance suitable projects and understand relevant risk and safeguards required.

- **Puro.earth**\(^\text{24}\) is the world’s first voluntary carbon removal marketplace for businesses globally in their science-based journey. The marketplace offers verified CO2 removals which are comparable and tradable. Its CO2 Removal Certificates (CORCs) are carbon offsets based on factual carbon removal from the atmosphere. They work with 22 companies from 6 countries to define the tradable asset of carbon removal.

- **Indigo**\(^\text{25}\) has created a marketplace to encourage farmers to make use of regenerative agriculture techniques such as rotating crops and avoiding tilling the soil. Farmers are paid based on the calculated amount of carbon the soil has captured, which is around USD15 or USD20 per tonne (versus USD100 per tonne for direct air capture technologies).

- **Nori**\(^\text{26}\) is another carbon removal marketplace where companies can buy credits and pay farmers to store carbon in soil using sustainable farming practices. The carbon removals available in the marketplace have been quantified and verified by an independent third party.

- **Natural Capital Partners**\(^\text{27}\) works with more than 300 clients in 33 countries delivering solutions including offset projects to ensure their environmental programmes deliver value for their business.

- **Biodiversity banking or a conservation bank** is a market enterprise that provides landholders incentives to protect species and their habitat. The **Biodiversity Offsets Scheme**\(^\text{28}\) in Australia is a framework to avoid, minimise and offset impacts on biodiversity.

- In August 2020, **XCHG**\(^\text{29}\) announced the launch of the **Global Emissions Offset product** (GEO), an exchange-traded voluntary carbon offset product, which claims to establish for the first time a credible, standardised price for voluntary carbon offsets based on market data.

---


\(^{26}\) Nori. https://nori.com/.


\(^{29}\) Commodity Exchange. XCHG. https://www.xchg.net/.
In addition, it is increasingly possible to access nature based projects through a fund. For example, HSBC Global Asset Management has entered into a joint venture with the climate change advisory and investment firm Pollination to create HSBC Pollination Climate Asset Management which aims to be the world’s largest manager of natural capital including assets such as farmland, forests and water.

The challenges relating to market scale up are concepts around credibility and additionality. Many believe that carbon offsetting goes against the pathway for reducing emissions as it allows for GHG growth in the belief that GHG’s can be “cancelled out” with offsets. Carbon offsets may create false incentives for companies to believe they can continue with the emissions and are not incentivised to reduce absolute emissions. This is rational in theory, but in practice the fastest way to solve the climate problem is to create a mechanism so that those that want to contribute a more positive environmental outcome compared with their environmental impact can do so via offsets.

The concept of additionality has historically been tough to overcome. It refers to whether a project delivers incremental emissions reductions above what would have been delivered anyway versus a baseline scenario. Climate integrity and the credibility of the credits is critical. Buyers of offsets need to know that the climate impact is positive, and make sure that carbon credits are not double counted somewhere else.

The voluntary carbon offset market lacks uniform regulations, standards and process, especially on how to quantify and verify the offset projects by small private companies. Frameworks for how to classify the different types of carbon removal technologies are appearing. For example, Net-Negative Tech has classified technologies into three categories, low carbon (e.g. lower carbon fossil fuels), Zero emissions systems (e.g. industrial energy efficiency and carbon capture) and carbon negative (e.g. bioenergy with CCS and direct air carbon capture). This is useful because it helps with the different types of impact across the man made to Nature Based Solutions. Other issues include greenwashing (credibility of projects), leakage (emissions may be simply displaced elsewhere), permanence (reductions are subject to reversal) and transparency in certification fees which can be a barrier for small projects. Pricing of offsets also lacks transparency, differs between sectors and is driven by hard-to quantify factors like additionality.

---


3. How could finance catalyse an efficient carbon offsets market?

WWF estimates that the majority of the USD53bn\(^{33}\) invested annually to preserve and restore ecosystems currently comes from government and philanthropic funding. This leaves a USD250-350bn funding gap. Corporate demand for offset projects is increasing and offers scope for the private sector to plug the gap. The foundations are already in place to facilitate scale up. The next steps are to unlock opportunities for direct investment and innovate to make blended finance propositions fit for purpose. Financial institutions could catalyse the carbon offset market through different mechanisms.

**Direct investment** includes investment in physical assets\(^ {35}\), carbon sink infrastructure or carbon credits, which can be financed via debt or equity. Large-scale direct investment could include man-made CCS infrastructure alongside with NBS projects related to forests and oceans. The direct investment type likely depends on the sector or industry the company is working in. For example, oil and gas producers are naturally active investors in carbon removal, including Shell, BP, Chevron, Oil Occidental Petroleum, who are increasingly making public disclosures about their ambition. Shell aims to reduce emissions by 60% by 2050, half of which will be achieved through carbon-removal and reforestation projects. In addition, it will invest USD300m in carbon offsetting in the next 3 years and provide customers with the option to pay off to offset fuel usage emissions\(^ {35}\). Shell Australia acquired a carbon offsets company that develops and manages over 70 carbon farming projects\(^ {35}\). 10% of Total’s\(^ {37}\) group’s R&D budget is allocated for Carbon Capture, Utilization and Storage (CCUS) technologies. Total sees themselves as a coordinator to identify the right technology and work with the right partners to ensure that projects are commercially and financially viable and ultimately “de-risked” to be more attractive to bankers and investors. For the oil and gas sector there are opportunities across both man-made and Nature-Based Solutions.

For other sectors it makes sense to adopt a nature based approach. For instance, as part of Apple’s carbon-neutrality pledge, it will establish an Impact Accelerator to invest in minority-owned businesses that drive positive environmental change, and a carbon solutions fund to invest in restoration of forests and natural ecosystems\(^ {38}\). Bank finance can catalyse the carbon offset market by facilitating and co-financing these investments. Products and services range from offset linked lending to corporates to make large direct investment in projects in geographies unrelated to their activities, and sustainability linked lending to corporates for insetting projects with suppliers. As with climate related finance, transparency is a useful showcase that financing is linked to tangible outcomes. Scaling up labelled bond issuance for carbon sinks – e.g. blue bonds, creates a market as well as builds credibility for projects when there is assurance associated with issuance. Finance institutions can also offer advisory services for companies willing to invest via own vehicles or acquire carbon sink solutions.

**Project specific financing** could involve impact loans, infrastructure finance including blended finance and different investment management strategies (passive index investing or active management). For example, HSBC agreed a loan with Sécé Environnement to refinance its bank debt, while introducing ESG criteria linked to biodiversity. HSBC also facilitated a World Bank-IBRD Sustainable Development Bond, that raised awareness for the critical role that water and ocean resources play. HSBC also facilitated a Green bond in Mexico for protected agriculture.

Planet Tracker, a non-profit financial think tank aligning capital markets with planetary boundaries, has proposed a ‘blue bond’ to be used to finance the replenishment of fish stocks by subsidising fishing firms to reduce capacity to allow population recovery. Similarly, NBS bonds related to carbon offset projects can be developed.

---

As an example of pooled funds, HSBC Global Asset Management & Pollination has recently announced a joint venture to create world’s largest natural capital manager. Through the creation of private funds investing in diverse range of projects, the partnership aims to offer investors a wide exposure to global natural capital themes in both emerging and developed markets. The aim is to attract capital from institutional investors, including sovereign wealth funds, pension funds and insurers specifically for natural capital investing. The first fund, which aims to launch mid-2021, will look to raise up to USD1bn followed by a carbon credit fund at up to USD2bn.

Blended finance uses public and philanthropic funding to mobilise private capital and build capacity, providing technical assistance, grants, concessional loans and guarantees to reduce the risks and attracts commercial investors. In the example of Brazil, to tackle deforestation, the government announced the Amazon Fund to fund projects. The fund, directed by the Brazilian Development Bank, manages public and private donations including from governments of Norway and Germany, and oil company Petrobras. The projects issue emission reduction offsets, per the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) initiatives mechanism.

Equity investments are also made by impact venture capital funds & biodiversity and impact funds. For example, the KKR Impact Fund invested in GreenCollar (a natural resource project development platform) and in New Forest Company (an East African Sustainable forestry business). Other equity funds include Breakthrough Energy Ventures - a USD1bn fund that supports the development of world-saving technology that might not have a quick turnaround; G2VP - a venture capital fund focused on emerging technologies; and Incite Ventures.

---

4. What are the enablers required to scale the market?

Finance has the foundation of products and services to support market growth in the voluntary offsets market standards, verification and certification, would help to catalyse growth.

**Standards and certification:** Currently, there are a range of standards for different types of projects. 88% of the market is verified by three standards: VCS (Verified Carbon Standard), CCBS (The Climate, Community and Biodiversity Standards) and Gold Standard.41

The VCS alongside the CCBS are developed and managed by Verra, a non-profit organisation in Washington. The VCS is the most widely used voluntary emissions reduction standard, with c.1,600 projects that reduced or removed >450m tonnes of carbon and GHG emissions. The VCS rules and requirements are used to certify projects, following which project developers are issued tradeable credits called Verified Carbon Units (VCUs) that can be sold in the open market. The standard is supported by a registry system that records all projects, an accounting methodology to assess projects and an independent audit process. The CCBS evaluate land management projects that reduce GHGs emissions such as reforestation and sustainable agriculture. The Gold Standard was founded by the WWF and NGOs as a benchmark under the UN’s Clean Development Mechanism to ensure projects contribute to sustainable development. Projects undergo a certification process, following which they are allocated certified credits, which can be traded openly.

To qualify for carbon offsetting, there needs to be clear evidence that the project would not have been possible without the additional funding. Certification of carbon sink allowance is key as it is presented in the financial plan as well as in the investors potential expectations. Certification such as REDD+ allows for payment of carbon captured when it actually occurs – building financial solutions could enable deployment at scale.

The International Civil Aviation Organization (ICAO) recognised six eligible programmes: Verified Carbon Standard (VCS), Gold Standard, Climate Action Reserve (CAR), American Carbon Registry (ACR), Clean Development Mechanism (CDM), and the China GHG Voluntary Emission Reduction Program, and established that only Eligible Emission Units (EEUs) issued between 1 January 2016 and 31 December 2020 will qualify.

In July 2020 the International Union for Conservation of Nature (IUCN) published the first set of benchmarks for nature-based solutions to create a shared language for stakeholders. The new standard is using eight criteria to help governments, businesses and civil society to design and assess NBS projects and maximise their potential to address climate change. However, there is still lack of well understood and robust systems for certifying the quality of nature-based solutions, and many offsets which companies or sectors buy do not establish high enough carbon prices to drive subsequent within-sector decarbonisation.

**Recommendations for policy makers**

**Global standards and kitemarks**

Under the compliance market such as the EU ETS, parties can sell and purchase EUAs or CERs from the Clean Development Mechanism. Unlike the compliance market, in the non-legally binding voluntary carbon offset markets, there is no compulsory standard of methodology for credits and credits are not tradeable between schemes.

Creating a global standard and clearing house for both compliance and voluntary credits could be beneficial in a number of ways. It would increase market transparency, create a uniform verification process for credits, allow implementation of common accounting principles, enable a stricter audit and streamline the project due diligence. Unitig global trading mechanisms under one kitemark could foster the credibility of the voluntary market and attract further investors.

---

✔ Creating a global/country registry

Creating a central depository where project developers and companies register offsets and record the purchase and sale of nature-based projects and offsets would increase transparency and build from the credibility that a kitemark would provide across the market.

✔ Creating an impact curve

Using scientific knowledge to build an ‘impact curve’ about the most important carbon sinks to preserve and restore would help create a picture of where carbon offsetting using Nature-Based Solutions is needed the most, therefore attracting capital to the highest impact projects.

Traceability of carbon offsets and impact could be explored using Al or Blockchain technology. This would help bring credibility to the market.

✔ Uniform carbon prices and carbon market

In 2020, c.25% of global emissions will be covered by a mandatory carbon price (markets or tax). Voluntary carbon prices are also part of the ecosystem with organisations, businesses and investors. At global level USD40/t CO2e to USD80/t CO2e range is needed in 2020 to stay consistent with achieving the temperature goal of the Paris Agreement, as identified by the High-level Commission on Carbon Prices. The first auction of CO2 Removal Certificate conducted by the Puro platform in May 2019 was EUR 26.92, almost aligned by the EU ETS.

The Paris Agreement: Article 6

Under the Paris Agreement, countries agreed to set up a new global carbon market system to help countries decarbonise their economies at lower cost.

Three separate mechanisms for “voluntary cooperation” towards climate goals are proposed:

♦ A country that has beaten its Paris climate pledge could sell any overachievement to a nation that has fallen short against its own goals.

♦ A new international carbon market, governed by a UN body, for the trading of emissions reductions created anywhere in the world by the public or private sector, for example through renewable power plant, an emissions-saving factory upgrade or forest restoration. This system known as the Sustainable Development Mechanism (SDM) is due to replace the Clean Development Mechanism (CDM), established under the Kyoto Protocol.

♦ A formal framework for climate cooperation between countries, where no trade is involved, such as development aid.

♦ Some of the many issues surrounding Article 6 include:

♦ The importance of avoiding double counting, which is when the carbon credits are included by both the host country and the purchasing country.

♦ Ensuring a net reduction in emissions rather than just offsetting them elsewhere.

One of the main aim of the 2021 United Nations Climate Change Conference (COP26) is to finalise Article 6 of the rulebook and to set out rules for a global carbon market and the exchange of carbon credits.
Accounting standards for offsets

Including NBS into existing carbon accounting such as the Greenhouse Gas Protocol and SASB would help corporates build credibility that they are taking emission reduction seriously. The Greenhouse Gas Protocol Initiative is a multi-stakeholder partnership convened by the World Resource Institute (WRI), the World Business Council for Sustainable Development (WBCSD) and a coalition of international companies. The initiative consists of two standards for i) corporate accounting and reporting and ii) project accounting. GHG Protocol for Project Accounting47 provides specific principles and methods for quantifying and reporting GHG emissions from climate change projects. The protocol is a guideline for project developers, designers of initiatives and corporates. The Land Use, Land-Use Change, and Forestry (LULUCF) Guidance developed by the WRI supplements the project accounting Protocol. Further corporate guidance on the land sector will be published by the GHG Protocol and SBTi in Sep 2020 and first half of 2021.

Together with the existing guidance, there are a number of accounting models to account for emissions, with no form rules. Creating and adhering to one set of global principles could foster the credibility of the market and create a uniform reporting for carbon offsets.

Tax incentives

Tax incentives could be implemented for verified Nature-Based projects and offsets credits facilitated by the NBS kitemark and common registry as recommended above. Alternatively, a form of Debt-for-nature swaps where counterparties agree to a debt reduction based on the preservation of and investment in conservation projects.

Recommendations for the financial services industry

Create liquidity via a common market mechanism

Currently, the different trading mechanisms for voluntary carbon offsets are creating an access barrier. A common, certified marketplace that is accessible to different types of users (e.g. from consumers to institutional investors to corporates) globally can be a strong signal to investors about the credibility of the offsets market and attract more liquidity.

Creating a trading platform via an established exchange could provide formal governance around trading, attract further investor funding and provide more liquidity in the market. The presence of a clearing house can also provide risk mitigation for the different types of offsets across the market, as infrastructure is nascent and requires further development.

Create reporting principles for NBS impact

Similar to the Green Bond Principles (formulated by International Capital Market Association), industry-led NBS principles would provide the voluntary market with guidelines to increase transparency and disclosure. Impact reporting, including relevant metrics helps create a risk-reward trade-off scale for investors, enabling comprehensive project decision making. On impact reporting, IFC, together with leading impact asset managers and asset owners and industry associations launched Operating principles for Impact management in 2019, with the objective to establish a common discipline and foster increased mobilisation of capital for impact48. While the principles are not compulsory, they are adhered to by c.100 signatories globally. Carbon offset projects adopting the principles for reporting could foster credibility with institutional investors. Adhering to the same standards would allow easy comparison of different offsets and their impact.

Create global investment funds and platforms

Many institutional investors need a sizeable project to make an offset proposition worthwhile. The creation of funds and blended e.g. philanthropy, public and private, capital attracts institutional investment capital as well as corporate foundations that would otherwise stay on the sidelines. Using inputs from a global registry of projects, funds could be created based on a country, theme or impact basis. Replicating coalition approaches that already exist could accelerate the development of the market; this includes the FAST-Infra initiative (‘Finance to Accelerate the Sustainable Transition-Infrastructure’), an industry-led, private-public partnership, which aims to develop sustainable infrastructure as an asset class through a labelling system, and scale up sustainable infrastructure finance and market interventions to mobilise private investment.

Incentivise product innovation based on NBS standards

Growing the market means offering financial products that respond to demand from different industries and investors. For example, a consumer goods company could be supportive of a “regenerative agriculture bond” that gives farmers time to allow their land to recover and become a carbon sink. Meanwhile a blue bond could be used to subsidise the difference in cash flow between the current business-as-usual scenario and one which allowed recovery for the initial 3-5 years for those that reduce their capacity. Regenerative agriculture or forest restoration initiatives could be packaged into projects for fund scale investment.

The demand for carbon offsets is set to increase as individuals, corporates and investors seek to compliment absolute emission reduction activities with projects that enable them to address residual emissions. The finance industry is vital to facilitate and promote scale up of offsets. Creating an offset market at scale will help mitigate the harmful effects of climate change, in turn providing the foundations for a prosperous healthy economy.

For more than a decade, HSBC has been at the forefront of the sustainable finance market. In November 2017, HSBC made five sustainable finance pledges. We committed to provide USD100 billion of sustainable financing and investment by 2025, source 100 per cent of electricity from renewable sources by 2030, reduce our exposure to thermal coal and actively manage the transition path for other high carbon sectors, adopt the recommendations of the task force on climate related financial disclosures to improve transparency, as well as leading and shaping the debate around sustainable finance and investment.

Taken together, these commitments reflect the scale of the challenge of delivering the Paris Agreement and UN Sustainable Development Goals. They also demonstrate the heights of our ambition to be a leading global partner to the public and private sectors in the transition to a low-carbon economy.”

Daniel Klier, Global Head of Sustainable Finance

“Each and every one of us has a stake in developing a sustainable economic system. It is the combined responsibility of all players in society to respond to climate change, rapid technological innovation and continuing globalisation to secure a prosperous future. Yet addressing these changing forces is by no means straightforward. More work is needed to provide the financial system with the right toolkit to solve sustainability challenges.

Working with internal and external partners, this central think tank is uniquely positioned to lead and shape the debate. We will promote the sustainable finance agenda using our global network which covers the world’s largest and fastest growing trade corridors and economic zones. We can provide the connections needed to foster sustainable growth across borders and geographies. We aim to mobilise the capital flows needed to address the world’s major sustainability challenges.”

Zoë Knight, Group Head, HSBC Centre of Sustainable Finance