ENVIRONMENTAL ATTRIBUTE CHALLENGES

ESG. NET-ZERO. CARBON SEQUESTRATION. IN 2022 AND, WE BELIEVE IN 2023, ALL OF THESE TERMS WERE, AND WILL CONTINUE TO BE, WIDELY REFERENCED IN MAINSTREAM MEDIA PUBLICATIONS, CORPORATE GOVERNANCE AND SHAREHOLDER MATERIALS, AND REGULATORY FILINGS AND ISSUANCES. BY **LEVI MCALLISTER**, PARTNER AT **MORGAN LEWIS & BOCKIUS LLP** AND HEAD OF THE ENERGY COMMODITY TRADING, COMPLIANCE & ENFORCEMENT AND THE EV WORKING GROUPS, AND **PAMELA T WU**, PARTNER AT **MORGAN, LEWIS & BOCKIUS**.

Although each term refers to something different from the others, at their core these phrases reflect a growing social consciousness in the United States and abroad concerning carbon dioxide (CO_2) presence in the atmosphere and the impact of individual and corporate actions on greenhouse gas (GHG) emissions. For example, net-zero refers to the balance between the amount of GHG produced and the amount removed from the atmosphere.

In today's world, these terms and phrases are employed for more than just lip service. Corporate documents or individuals that make reference to environmental, social, and governance (ESG) investing criteria, achieving net-zero, or pursuing sequestration initiatives often do so with specific, targeted actions in mind designed to achieve certain goals. Of course, that raises a threshold questions of how an entity or individual can achieve reduced GHG goals or demonstrate net-zero operations. In response to growing public and internal entity demands to address climate change, corporate entities and individuals are seeking to reduce carbon footprints through the generation or purchase of environmental attributes.

The purchase and sale of environmental attributes is an established concept in the energy industry, with environmental attribute provisions having long been embedded in energy generation offtake agreements. However, environmental attributes include more than just those created by virtue of the development and operation of a renewable generating facility. Most recently, many corporations have sought to minimise the impact of their carbon footprints through the purchase and sale of a different product – carbon offsets.

As discussed below, environmental attributes include multiple types of products. And while there may be conceptual similarities among those products, one product – carbon offsets – stands out for both its accessibility to all industries as a way to demonstrate reduced carbon footprints and the largely non-existent regulatory structure that governs its purchase and sale. Indeed, those two characteristics combined raise questions among corporate purchasers about whether purchased carbon offsets accurately reflect what the purchaser believes them to be and whether the purchaser can rely on such offsets to successfully demonstrate a reduced carbon footprint. The following discussion considers some of the most relevant and pressing issues concerning carbon offsets and raises some thoughts for consideration as ESG, net-zero, and carbon sequestration issues make their way into 2023.

Environmental attribute products

It is not uncommon for a product offtake agreement in the energy industry to separately address environmental attributes, and to do so in a way that defines environmental attributes in general terms such as an award, credit, offset, or tangible right issued pursuant to applicable laws or programmes. In the quickly evolving area of environmental attributes, the attribute of the next decade may not even exist today. In short, environmental attributes come in many forms and sectors. Nevertheless, one commonality among environmental attributes is that they all are environmental products used to help manage and reduce the carbon emissions associated with the generation, manufacturing, or production of goods or the provision of services. Often used interchangeably, each of the following environmental products have unique objectives, characteristics, and challenges.

- *REC* – A renewable energy certificate (REC) is a legal instrument used in renewable electricity markets to account for renewable electricity and its attributes, whether that renewable electricity is installed on the organisation's facility or purchased from elsewhere. The owner of an REC has exclusive rights to the attributes of one megawatt-hour (MWh) of renewable electricity and may make unique claims associated with the renewable electricity that generated the REC.
- *RIN* – A renewable identification number (RIN) is a credit representing renewable fuel that is produced and blended into transportation fuels in the United States and is a necessary product for entities subject to the Environmental Protection Agency's (EPA's) Renewable Fuel Standard (RFS) to demonstrate compliance with RFS mandates

and requirements. Conceptually, an RIN is the transportation fuel sector's version of the electricity generation sector's REC.

- *Carbon credit* – A carbon credit is a tradable certificate or permit that sets a maximum level of carbon emissions for the holder of that certificate, which would vary depending on the industry, company, or country. Unlike an REC, which provides the holder with the right to claim 1MWh of renewable energy production, a carbon credit gives the holder the right to emit 1 tonne of CO_2, or an equivalent amount of other GHGs.
- *Carbon offset* – A carbon offset is a transferrable instrument certified by a government or independent certification body to represent an emission reduction of 1 metric tonne of CO_2, or an equivalent amount of other GHGs. The term carbon offset broadly refers to a reduction in GHG emissions – or an increase in carbon storage, eg, through land restoration or the planting of trees – that is used to compensate for emissions that occur elsewhere. Whereas the holder of a carbon credit holds the right to emit 1 tonne of CO_2, the holder of a carbon offset can represent that it has reduced the amount of CO_2 in the atmosphere by 1 tonne through the project to which the carbon offset relates.

Interchangeability and overlap

As the above suggests, these four environmental attributes share many similar traits and characteristics. Most fundamentally, each of them adv ances a policy agenda of reducing GHG emissions in the atmosphere through either increased renewable energy production, reduced carbon emissions, utilisation of clean fuels, or investment in GHG removal projects. Moreover, all four are standalone, legally tradable products that, by themselves, hold market value separate and distinct from the underlying project that leads to their creation, ie, the renewable energy–generating asset or the carbon-offset forestry project.

Indeed, a robust contractual marketplace exists for the purchase, sale, and trade of each of these four environmental attributes. Of course, participation in that marketplace also raises unique and nuanced issues that purchasers and sellers must carefully consider as they contract for the purchase and sale of RECs, RINs, carbon credits, or carbon offsets. That subject is itself worthy of a lengthier, more detailed article discussing relevant issues that counterparties should consider when contracting for the purchase and sale of environmental attributes.

Notwithstanding their similarities, there are also key differences among these products. For example, RECs and carbon credits are often traded in the context of mandatory compliance regimes setting emission reduction thresholds that market participants must meet. Likewise, RINs are subject to regulation under the EPA's RFS and are similarly directly related to federally imposed clean fuel goals and mandates.

In contrast, carbon offsets (the focus of the remainder of this discussion) are largely purchased and sold outside the purview of US regulation; their market value generally stems from corporate environmental impact goals rather than regulator-imposed compliance mandates. For this reason, participation in the carbon offset market is a bit like the Wild West in comparison with the other products mentioned above and, in turn, raises a multitude of questions that savvy market participants could and should consider prior to contracting for carbon offsets.

Carbon offsets issues

In order to be an effective means of demonstrating that it reflects the reduction of carbon emissions, a carbon offset must successfully represent 1 tonne of CO_2 emissions that is permanently removed from the atmosphere. In other words, the holder of the carbon offset must have confidence that the offset commodity it has purchased can be verified to actually result from a project that removed or offset carbon emissions from the atmosphere permanently that would not otherwise have been removed but for said project. Entities that purchase carbon offsets for purposes of demonstrating compliance with net-zero initiatives or reduced carbon footprints must, therefore, be assured that a carbon offset adheres to a generally accepted principle that it is verifiable, permanent, additional, and otherwise unclaimed.

Achieving this assurance has historically proven difficult, if not impossible, to-date. Purchasers and holders of offsets proceed along a caveat emptor pathway, and must take care to consider and address several germane issues associated with the carbon offsets that are at issue in any given offset purchase and retirement transaction. Although there are numerous issues to consider, below are three that are fundamental to the transaction of a carbon offset purchase and sale that should be top of mind before holding that offset out as representative of a reduced corporate carbon footprint.

- *Variability in standards* – A successful carbon offset must be verifiable as being what the holder expects it to be. The verification process and, in turn, the resulting verification are only as good as the applicable standard being used to verify the offset.

Nevertheless, a threshold issue associated with carbon offsets is that there is no accepted mechanism in place to ensure that the offsets work – that offsets reflect what the offset holder claims they reflect. This is rooted in the lack of a

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common set of standards that must be satisfied by all carbon offsets transacted. As it currently stands, carbon offset verification standards vary, thereby leading to differences in the quality or credibility of offsets. As some studies and reports have detailed, some carbon offsets result from projects that do not meet one or more of the other qualities noted above: permanent, additional, and otherwise unclaimed. As a result, the carbon offset being used to demonstrate a reduced CO_2 footprint or achievement of net-zero goals is actually an offset that does not reflect the stated emissions reductions; the offset is not what the purchaser thinks it is.

The takeaway: A holder of an offset must carefully consider and assess the sufficiency and robust nature of the standard used to verify the offset(s) at issue.

- *Absence of permanence* – Permanence refers to whether a carbon offset is associated with GHG reductions that are permanent and cannot be undone. One type of commonly purchased offset is one produced by nature-based projects, such as forest restoration efforts that are designed to sequester/remove carbon from the atmosphere. However, in those instances, permanence is difficult to achieve and demonstrate. For example, a nature-based project must continue forever and must be immune from destruction – eg, through a forest fire or from the trees being cut down a decade or two from now – in order for the carbon removal generated by the project to exist permanently. Absent that, sequestered or removed carbon would be released again, thereby negating the "carbon offset" that the offset holder was able to claim.

Such a permanent circumstance is likely impossible to guarantee. To address that potential, some corporate purchasers enter into time-based contracts that effectively guarantee that the project generating the offset will remain intact for the period covered by the contract. Yet, at the end of that period, the project may be destroyed and the carbon no longer "removed". Moreover, some studies have found instances of nature-based projects being destroyed or substantially modified in a very short period – fewer than 10 years.

The takeaway: For an offset to be credible, purchasers should have assurance that the carbon removal the offset represents will continue unimpeded permanently. Nature-based projects in particular (but others as well) raise questions as to whether permanence of carbon removal is possible and, therefore, whether the accompanying carbon offset validly reflects what the holder expects it to reflect.

- *Absence of additionality* – Additionality refers to the idea that a project must have occurred only because of the funding that was received from the sale of the offset credit. If the project would have occurred without the funding or if some other source of funding likely would have been found, then the offset does not qualify as additional. Reliance on offsets that are not additional necessarily leads to over-counting of carbon removal—that is, allowing purchasers to claim credits for projects that the funding did not actually bring about allows them to claim credit for something that did not actually lead to a reduction in emissions.

Many offsets appear, on their face, to have questionable claims of additionality. However, it is difficult to prove the absence of additionality. This determination requires an assessment of whether the possibility of selling carbon offsets played a critical role in the decision to pursue an activity or project. Despite purported efforts by standard-setters to improve on this area, additionality remains a challenge that has reared its head in various types of projects – such as renewable energy projects being developed that would likely have been developed anyhow in order to meet increased power load, or forest-based projects in which a forest was preserved that was never intended to be destroyed. Establishing objective criteria to distinguish additional projects from non-additional projects has proven to be challenging and runs the risk of inadvertently misidentifying a truly additional project as a non-additional project and vice versa.

The takeaway: Purchasers of offsets should be mindful of this issue and especially cognisant of regulatory or standards-related efforts to address additionality. This area is one in which uniformly acceptable standards, which currently do not exist, would be beneficial. Potential regulation of this area (discussed below) could address these concerns.

Potential regulation

Due to the growing concerns over the quality of carbon offsets and market fragmentation described above, the offsets market has a significant risk of fraud. In fact, some critics are keen to allege that carbon offsets are "failures" or "riddled with fraud".

Fraud is a challenge for offsets given their distinctive attributes. In most cases, the purchaser of an offset cannot realistically verify on its own that the promised reduction in emissions has occurred and will not be reversed. Instead, the purchaser must rely on certain assurances made by the seller or an auditor – for example, that the underlying environmental project would not have occurred absent the potential to sell offsets or that a given forest storing carbon will not be cut or burned down. These types of assumptions and assurances make the market for offsets particularly susceptible to fraud and manipulation.

Recognising this potential, the Commodity Futures Trading Commission (CFTC) held the Voluntary Carbon Markets Convening on June 2 2022 to discuss issues related to the supply of and demand for high-quality carbon offsets and to solicit input from market participants on the CFTC's role in regulating the carbon offset markets. The discussion at the convening focused on the need for additional transparency and standardisation in the voluntary carbon markets

to enhance confidence in the markets and the ability to trust that the carbon offsets transacted represent the actual reduction or avoidance of carbon emissions. Multiple carbon offset derivatives contracts are listed on the CFTC's regulated exchanges, and more are expected to be listed. The CFTC has jurisdiction to regulate such contracts and has limited enforcement authority under the Commodity Exchange Act to pursue actions for fraud and manipulation.

Also on June 2, the CFTC released a request for information (RFI) to better inform its understanding and oversight of climate-related financial risk related to the derivatives markets and underlying commodities markets, including the voluntary carbon markets. The CFTC solicited feedback on its potential role in the voluntary carbon markets and whether there are ways in which it could enhance the integrity of voluntary carbon markets and foster transparency, fairness, and liquidity in those markets. The CFTC also asked whether there are aspects of the voluntary carbon markets that are susceptible to fraud and manipulation and/or merit enhanced commission oversight, and whether it should consider creating some form of registration framework for market participants in the voluntary carbon markets.

Market participants and stakeholders offered a range of comments and input to the CFTC in response to the RFI, but at base, the comments reflect a lack of consensus on what role the CFTC should play in the voluntary carbon markets. Some urged the CFTC to pursue strong oversight of the voluntary carbon markets, encouraging it to implement rules governing the voluntary carbon markets and a robust standard for auditing purposes, and to establish a registration framework for voluntary carbon market participants. Others recommended that the CFTC develop definitions for key terms in the carbon markets to build greater transparency. And several other organisations commented that it may be premature for the CFTC to develop regulations and a registration framework as these may inhibit existing industry efforts, progress, and innovation. However, they encouraged the CFTC to continue to facilitate ongoing discussions among industry stakeholders in the voluntary carbon markets.

As we close the book on 2022 and look towards 2023, regulation of carbon offsets is certainly on the horizon. Holders and purchasers of carbon offsets should take care to consider two overarching items as they participate in the carbon offset market: (i) the potential for federal regulation of offset purchases and sales and (ii) contractual protection in offset purchase and sale agreements that addresses the key risks and issues, including those discussed in this piece. ■

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