# A Summary on Property Rights in Digital Assets and Carbon Credits

As a legal consultant specializing in blockchain, digital assets, and regulatory strategy, I have encountered numerous questions regarding the evolving legal frameworks that govern these emerging areas. Previously, I have explored the tokenization of intellectual property rights and their regulatory frameworks across various EU countries (full report here). Now, my focus shifts to key developments in the UK and Canada, where recent legislative reforms and court rulings are shaping how digital assets are recognized under the law. My involvement in both the development of blockchain technologies and the legal discourse surrounding digital assets has provided me with firsthand insight into the complexities of their regulation. In this short document, I aim to explore the evolving legal recognition of digital assets such as cryptocurrencies, non-fungible tokens (NFTs), and tokenized carbon credits, along with the challenges that remain. These issues are becoming increasingly relevant as digital assets and environmental markets grow, and clear property rights become essential for protecting stakeholders and facilitating innovation.

There are global efforts on those topics, however it seems the UK is leading this shift through legislative reforms and significant court cases, setting important precedents for how these assets are recognized and protected under the law. This emerging legal landscape ensures that digital assets receive the same protections as traditional property, offering clarity and legal recourse for owners and users of these assets.

## 1. The Property (Digital Assets etc.) Bill

In September 2024, the UK Parliament introduced the Property (Digital Assets etc.) Bill, a landmark piece of legislation designed to recognize digital assets—such as cryptocurrencies, NFTs, and carbon credits—as personal property. This legislative initiative follows recommendations from the **Law Commission's 2023 report**, which called for the creation of a new category of personal property specifically tailored to digital assets.

The Bill establishes a third category of property, distinct from traditional categories like "things in possession" (physical items) and "things in action" (rights-based assets such as debts or shares). This new category applies to digital assets like cryptocurrencies, NFTs, and carbon credits, ensuring that they are recognized, owned, and traded under the law.

By including carbon credits within this framework, the Bill also acknowledges the growing importance of these environmental assets in the fight against climate change. This recognition provides legal certainty for the trading and ownership of carbon credits, ensuring that they are treated with the same protections as more traditional forms of property.

## 2. Evolution of UK Law Toward Digital Asset Recognition

The introduction of the Property Bill is part of a broader trend in UK law aimed at addressing the unique nature of digital assets. The Law Commission's 2023 report confirmed that while digital assets do not fit traditional categories, they warrant recognition as personal property. This development builds on earlier court decisions and sets the UK apart as a leader in the regulation of digital finance and blockchain technologies.

- ***D'Aloia v Persons Unknown* (2024)**

One of the key cases that helped pave the way for the Property (Digital Assets etc.) Bill was *D'Aloia v Persons Unknown* (2024). In this case, the court had to determine whether stablecoins like Tether (USDT) could be treated as property under English law.

The claimant, Mr. D'Aloia, was the victim of a cryptocurrency scam and sought to recover his stolen USDT. The court had to address two central questions: (1) whether USDT could be classified as property, and (2) whether it could be traced through multiple wallets and funds to recover the lost assets.

The court held that USDT could indeed be classified as property under English law. In particular, the court concluded that USDT is neither a "chosen in possession" nor a "chosen in action," but rather a distinct form of property that can be traced and held in trust. The court ruled that USDT, as a digital asset, attracts the same property rights as other assets, making it subject to trust claims and asset recovery.

Additionally, the court addressed whether tracing was possible through mixed funds, as USDT had been transferred through various wallets. The court found that while tracing was theoretically possible, it could only be done in respect of equitable claims. Ultimately, in this particular case, the claimant was unable to successfully trace his USDT to the relevant wallet, and therefore the claim failed. However, the judgment set an important precedent for treating cryptocurrencies as property that could be traced in cases of fraud and misappropriation.

- ***Osbourne v Persons Unknown* (2023)**

Another landmark case that shaped the legal treatment of digital assets was *Osbourne v Persons Unknown* (2023), which dealt specifically with NFTs.

Lavinia Osbourne, a fintech consultant and founder of Women Blockchain Talks, discovered that two of her NFTs, from the "Boss Beauties" collection, had been stolen from her crypto wallet. These NFTs were valuable digital assets that not only represented unique digital artwork but also conferred certain exclusive benefits to the holder. Lavinia sought an injunction to prevent the sale or transfer of these NFTs and to recover them.

The court ruled that NFTs could be treated as property under English law, setting an important precedent for the legal treatment of these digital assets. The court also granted an interim injunction to prevent the sale or transfer of the stolen NFTs and ruled that they should be returned to the claimant.

One of the key takeaways from the case was the court's recognition of NFTs as a type of property that can attract trust and restitution claims. Furthermore, the case was groundbreaking in its use of blockchain technology to serve court documents. The court allowed legal notices to be served on the defendants via NFTs, marking the first time such a method had been approved in English law. This innovative approach to service highlighted how courts can adapt legal procedures to the realities of blockchain and digital asset ownership.

Ultimately, the *Osbourne* case affirmed that NFTs, like other digital assets, could be classified as property, allowing for legal protection and asset recovery in cases of theft or fraud.

**3. Legal Implications of the New Property Category**

The formal recognition of digital assets as property under the Property (Digital Assets etc.) Bill and these court cases offers significant legal protections for asset holders:

- **Increased Legal Protection**: Digital assets like cryptocurrencies and NFTs now benefit from clearer legal protections. They are treated as personal property, allowing asset holders to assert their rights in cases of fraud or misappropriation. This is particularly important, as I have seen firsthand how vulnerable individuals can be in the absence of strong legal frameworks. A close friend of mine had her savings stolen from her Kraken account, and while we were able to track where the funds were going, little to no action has been taken to recover them. The ability to treat digital assets as property under the law would have provided her with stronger legal recourse to address this injustice.
- **Asset Recovery in Fraud Cases**: The *D'Aloia* and *Osbourne* cases both demonstrate the potential for recovering digital assets in cases of fraud. By recognizing these assets as property, the courts have provided victims with stronger legal tools to trace and recover stolen or misappropriated digital assets.
- **Carbon Credits as Property**: The inclusion of carbon credits in the new property category ensures that these environmental assets are protected under the law. As the global carbon market grows, this legal recognition provides certainty for businesses and individuals trading in carbon credits.

Moreover, the recognition of digital assets and carbon credits as property will significantly impact various areas of law:

- **Divorce and Inheritance Disputes**: As digital assets become more widespread, they are increasingly involved in divorce settlements and inheritance disputes. The new legal framework provides clearer guidelines on how to classify, value, and divide these assets.
- **Corporate and Commercial Transactions**: Companies that hold or deal with digital assets will benefit from clearer legal rules surrounding ownership and transfer. This makes digital assets more reliable as financial instruments and facilitates their use in mergers, acquisitions, and other commercial transactions.

- **Intellectual Property and NFTs**: The *Osbourne* case demonstrated that NFTs, which often represent digital artworks, are now firmly recognized as property under English law. This offers stronger legal protections for creators, who can assert their ownership rights and seek legal remedies in cases of unauthorized use or theft of their tokenized works.

### 4. Global Unresolved Questions on Property Rights for Carbon Credits

While the legal recognition of carbon credits as property provides an important foundation, there are still unresolved questions surrounding ownership, particularly in cases involving land-use agreements. In discussions with Oneza Zaim from Planet2050, it became clear that some major questions remain: who owns the carbon credit when land is rented? Is it the landowner or the person renting the land and performing the activity that generates the carbon credit? How does statutory clarity affect the "Usufruct rights" over carbon credits, when tenure rights are not well-established / communities identified? How do carbon credits, typically treated as property, function as financial assets when traded as derivatives in secondary markets? What are the key differences between primary and secondary markets in carbon credit trading, and how do these affect the ownership and liquidity of the credits? In what ways could unresolved ownership questions discourage investors and hinder the growth of the carbon market? Why is it critical to establish clear legal frameworks that differentiate between property rights and derivative trading for carbon credits? How does legal clarity in carbon credit ownership impact development finance initiatives, particularly in regions where carbon credit projects are a key source of funding?

The UNIDROIT/UNCITRAL study on the Legal Nature of Verified Carbon Credits published this year, discussed these challenges in detail, particularly the proprietary rights and the complexities associated with verified carbon credits. The study emphasized the need for robust legal definitions to support cross-border trade and avoid ambiguities around ownership and enforceability in voluntary and compliance (regulated) carbon markets. It underscored the importance of clearly defined legal frameworks that can differentiate between property rights in carbon credits and their trading as financial derivatives. The study considered that such frameworks are critical to avoid legal uncertainties that could discourage investors and hinder the growth of the carbon market.

Although carbon credits are commonly considered property, they are increasingly being traded as derivatives in financial markets. In such cases, they can be bought and sold in transactions like futures contracts, options, or swaps, particularly in secondary markets. At this point, the credits are no longer tied solely to the environmental activity that generated them but become financial assets traded by parties who may be disconnected from the original carbon project. This raises significant challenges around transparency and verification. Here, solutions like Demia, which focuses on securely collecting and processing data, can play a critical role in ensuring the integrity of the data behind carbon credits. By providing real-time data for auditors, Demia helps ensure that carbon credits are generated from verified environmental actions, supporting the overall credibility of carbon markets and preventing issues like double-counting.

The questions highlighted above are critical because they touch on the nature of property rights in the context of environmental assets. If ownership questions remain unclear, development finance initiatives—often funded by the sale of carbon credits—may be at risk. Currently, this issue is not fully resolved under most legal frameworks, leading to potential conflicts in cases where different parties may claim ownership of the credits. Efforts like centralized registries and verifying transactions are being discussed to avoid double counting, highlighting a more critical need for robust d-MRV technologies.

Some early interpretations suggest that ownership would depend on the specifics of the land-use agreement. If the contract specifies that the tenant has rights to any environmental benefits generated by their activities, they may claim ownership of the carbon credits. If no such provision exists, the landowner may retain the rights and this becomes even critical on projects where communities are involved as beneficiaries. This ambiguity points to the need for more detailed legal guidelines around the ownership of carbon credits, particularly highlighting the need for clear legal frameworks.

Adding complexity to the issue, the Koch v. Canada case highlights how different jurisdictions treat the status of carbon credits under emissions trading schemes. In this case, Koch Supply & Trading LP and its parent company, Koch Industries, brought claims under the North American Free Trade Agreement (NAFTA) Chapter 11, seeking USD 31.3 million in damages after the abrupt cancellation of Ontario's Cap-and-Trade Program (OCTP) in 2018. The ICSID Tribunal ultimately dismissed the claims, ruling that Koch's emission allowances did not constitute a "qualifying investment" under NAFTA. The Tribunal's findings centered on the definition of "property," concluding that emission allowances under Ontario law did not meet the criteria for "exclusive control" necessary to be considered property.

NAFTA Chapter 11 refers to the section of NAFTA that deals with investor-state dispute settlement (ISDS). It allows investors from one NAFTA country (Canada, United States, or Mexico) to bring claims against the government of another NAFTA country if they believe their investments have been unfairly treated or expropriated in violation of NAFTA's investment protections. Under Chapter 11, investors can seek compensation for losses resulting from actions such as government expropriations or discriminatory practices. However, for a claim to succeed, the investor must prove that they had a qualifying investment, as defined by NAFTA.

In the Koch v. Canada case, the Tribunal found that Koch's emission allowances did not qualify as an "investment" under NAFTA Chapter 11 because Ontario law did not recognize them as property. The government's broad regulatory control over the allowances, including the ability to revoke them without compensation, meant they lacked the "exclusive control" necessary to constitute property.

The Koch v. Canada case raises important considerations for emissions trading schemes that span multiple jurisdictions, particularly regarding whether emission allowances are recognized as property. In Koch's case, because the emission allowances in Ontario were tied to a government program, the Tribunal ruled that they did not constitute property under NAFTA, despite their trading value in cross-border markets like California. This decision could complicate efforts to harmonize emissions trading schemes internationally, as different jurisdictions may take different approaches to defining carbon credits as property.

The outcome of Koch v. Canada suggests that future disputes around carbon credits, especially those involving international frameworks like NAFTA, the EU Emissions Trading System (ETS), or bilateral investment treaties, will depend heavily on how local laws define property. For example, Switzerland's bilateral investment treaties (BITs), which link its emissions trading scheme to the EU ETS, do not clearly define "movable and immovable property," creating further uncertainty for cross-border carbon trading.

Furthermore, these unresolved legal definitions will likely play a critical role in the Article 6 trading of Mitigation Outcomes under "Cooperative Approaches" and the "Sustainable Development Mechanism." This highlights the urgent need for attention to the role of states in defining the proprietary nature of carbon credits. Such examination is crucial not only for local and international arbitration but also for facilitating trade in secondary markets. As carbon credits continue to become key instruments in addressing global climate change and facilitating the availability of carbon finance, a well-defined legal foundation will ensure transparency, enforceability, and consistent application across jurisdictions and markets.

## 5. Conclusion

The evolving recognition of digital assets and carbon credits as property marks a significant step forward in their legal protection. The UK is leading this shift through progressive legislation, such as the Property (Digital Assets etc.) Bill, and landmark court cases, setting important precedents for how digital assets like cryptocurrencies, NFTs, and carbon credits are recognized and safeguarded under the law. However, as the carbon credit market grows, complex questions surrounding ownership—particularly in land-use agreements—remain unresolved.

It is important to notice that in the case of blockchain-native digital assets like cryptocurrencies and NFTs, the legal landscape is catching up with the technological reality. These assets are already secured and managed via blockchain's decentralized, immutable ledger, which ensures transparency and trust in ownership and transactions. The recognition of cryptocurrencies and NFTs as property under English law, as demonstrated in the D'Aloia and Osbourne cases, is an essential development that strengthens legal protections for asset holders.

For cryptocurrencies, blockchain inherently provides security and transparency, but the legal recognition of these assets as property reinforces the ability of victims of fraud or theft to assert their rights and recover stolen funds. In the case of NFTs, blockchain technology already guarantees the authenticity and provenance of digital art and collectibles, but the legal recognition of NFTs as property adds an additional layer of protection, allowing owners to seek restitution in cases of misappropriation.

The combination of blockchain technology with evolving legal frameworks offers comprehensive solutions for securing ownership rights and enforcing transactions across the digital asset landscape. Blockchain's inherent properties—decentralization, immutability, and transparency—complement the legal recognition of these assets, ensuring that both the technology and the law work together to protect stakeholders.

While carbon credits are not always blockchain-native, integrating blockchain technology into the tracking and verification process for these credits—alongside secure data management solutions —could provide a more transparent and tamper-proof system for verifying ownership and enforcing agreements. This integration would help resolve disputes over ownership and ensure that the benefits of carbon credits are distributed fairly among stakeholders. Blockchain technology could offer a decentralized, tamper-proof record of ownership and transactions. Blockchain could help to create a transparent, immutable ledger of who holds the rights to the credits. This would help clarify ownership by ensuring that any transfer of rights, whether between landowners, renters, or other parties, is securely and transparently recorded.

Moreover, in the context of land-use agreements, blockchain could help automate the enforcement of ownership rules through smart contracts that could be designed to automatically transfer carbon credit rights based on predefined conditions, such as the completion of specific environmental activities by the renter or verification by an auditor. This would significantly reduce the potential for disputes, as the system would transparently track and enforce who owns the credits based on the agreed terms.

As legal frameworks and technological solutions continue to evolve, the synergy between blockchain and legal protections will provide stronger safeguards for digital assets, including cryptocurrencies, NFTs, and carbon credits. This holistic approach supports market integrity, protects stakeholders, and facilitates innovation across both digital and environmental asset markets.

At de la Roche W. Consulting, we work at the intersection of technology, regulation, startups, and governments. We are committed to supporting both industry and regulatory processes that protect users while allowing innovative solutions to thrive. Our goal is to ensure that our clients—whether from the private or public sector—are equipped to navigate the complexities of digital assets and contribute to creating a balanced regulatory landscape that fosters innovation and safeguards users.