

## Sharing the Real World—Article 12 Can Unlock DePINs for TCF Banks

September 26, 2024



By Christopher McDermott  
Senior Counsel | Corporate Finance

When a Trade & Commodity Finance bank makes a secured loan to a commodities trader, the ultimate origin of the collateral is physical commodities. Even if the collateral transforms into intangibles like receivables, forward book or contract rights—it all started out with physical stuff.

I have recently been thinking about how the Uniform Commercial Code’s (“UCC”) new Article 12 might interface with one of the current preoccupations in the digital asset space: *decentralized physical infrastructure networks*, or DePINs. It occurred to me that DePINs might catch the eye of commodity banks and their customers. After all, the word “physical” is right in the name.

But what are DePINs?

You can think of DePINs as being akin to crowdsourcing. They are a way to incentivize a blockchain community to share existing physical assets, or contribute to development of new ones. DePINs have been used to share resources like surplus server space, computing power on GPUs, decentralized wireless networks, and decentralized energy grids for renewable energy producers. DePINs come in two types. They might be *physical* resource networks, dealing with real world assets (“RWAs”) that are tangible—like raw materials, equipment or transportation. Or, they might be *digital* resource networks, which deal with intangible resources—things like data, information and software. Adding AI to a DePIN can make each even more powerful and useful. Observers anticipate that the practical applications of DePINs will continue to expand.

Use cases for DePINs to date lean toward ideals of democratization of capital markets—letting small players come together to break down centralized ownership of critical infrastructure. So the role of a bank—by definition a centralized capital source—might seem anomalous if you picture DePINs solely as networks of passionate amateurs.

But there might be more to it than that. One problem with scaling DePINs is that widely decentralized individuals might not have access to the capital needed to acquire expensive physical infrastructure. Is the guy next door going to build a power plant in his garage? Possible, but unlikely. And, like the Lyft driver who starts out by sharing her personal car but later wants to add a whole fleet of cars, the trick is getting the money to do it.

Banks, of course, are in the business of bridging just that kind of capital need. (That’s what things like midstream financing are all about.) With some careful structure and attention to compliance, one could envision a DePIN structure as a viable takeout for a bank loan that provides capital so the DePIN can scale to a critical mass.

But hold up, you say—isn’t the goal of DePINs to *get rid of* centralized infrastructure, including financial infrastructure like banks?

To be fair, that is the tenor of much conversation of DePIN proponents. The stubborn thing about “real world assets,” though, is that you still have to deal with the real world. And in the real world, banks aren’t going away any time soon. Banks’ traditional customers are probably not disappearing. But DePINs could theoretically *expand* the market for bank capital.

A better way to think about an innovation like DePINs is not as a revolution to overthrow traditional finance, but as a way to help TradFi and DeFi grow into each other.

One thing that all DePINs rely on, though, is *tokenization*—the technological and legal process of representing RWAs as digital tokens on a distributed ledger network. Indeed, representing RWAs as tokens is the *only* way a DePIN can make sense. The underlying resource, whether it is itself physical or digital, must in all cases be represented digitally.

The contributors to DePINs are compensated in network tokens, which participants might use to pay for use of the resource.

And it is exactly here where it is critical for TCF banks to think about new Article 12 of the UCC.

For example, let's say a clever commodity trader participates in a DePIN organized by an oil pipeline and its users, to digitize and trade capacity. That trader might convert its traditional paper transportation contracts into digital tokens, contributing the capacity it holds to the network. The DePIN—knowing its users—might even engineer its smart contracts to facilitate tokenized forward contracts or other derivatives for the pipeline capacity. Presto—the valuable asset of pipeline capacity could achieve a new liquidity.

However, when that commodity trader comes to a TCF bank looking to borrow against those DePIN tokens, the bank would need to analyze the viability of those tokenized assets as collateral. In the U.S., that's where Article 12 enters the chat. Article 12 is a new amendment to the UCC that provides a legal framework for electronic assets. The intent behind Article 12 is to create more certainty for electronic assets like DePIN digital tokens, and thus to enhance their financeability.

And, while Article 12 has not yet been enacted in all U.S. states, it is already the law in many critical states (such as Delaware and D.C.). TCF banks urgently need to understand Article 12 *today*.

After all, those DePIN digital tokens might pop up in your collateral pool tomorrow!

If you would like to discuss further how Article 12 and the related changes to the UCC might impact tokenized RWAs and other digital asset finance, please get in touch with me or any of Cadwalader's experienced team of blockchain finance lawyers. <https://www.cadwalader.com/practice/blockchain-cryptocurrency-and-digital-assets>