# Northern Trust advances in voluntary carbon market with real-time credit generation



Northern Trust, listed on Nasdaq as NTRS, has made a significant advancement in the Voluntary Carbon Market (VCM), introducing the capability to generate digital voluntary carbon credits in near real-time through its platform, The Northern Trust Carbon Ecosystem™. This enhancement aims to streamline processes in the carbon credit sector, which has traditionally relied on manual procedures that are often resource- and time-intensive.

The company has collaborated with project developers and data collection providers to facilitate the generation of verified carbon credits, creating a more automated experience within the VCM. The Northern Trust Carbon Ecosystem can now receive data and record verified carbon credits in near real-time from participating providers. This includes collecting detailed data attributes, such as carbon dioxide capture flow rates and power consumption for carbon capture, along with key parameters necessary for verification and traceability regarding the carbon emissions captured.

Justin Chapman, the global head of Digital Assets and Financial Markets at Northern Trust, highlighted the transformation, stating, “Despite some automation and digitization in the VCM over the last few years, the measurement, reporting and verification of carbon credits has been characterised by manual processes which are resource- and time-intensive. This additional capability of The Northern Trust Carbon Ecosystem further enhances our ability to support a fully digital lifecycle management solution for voluntary carbon credits.” He emphasized how the platform facilitates project developers in expediting the commercialisation opportunities for their projects.

In the development of this ecosystem, Northern Trust has partnered with several entities. Notably, it is collaborating with InceptionX, which offers an end-to-end platform for equipment monitoring and carbon measurement. This partnership has allowed InceptionX to utilize advanced IoT devices and machine learning to transmit carbon data in real-time from a wastewater recycling installation in San Francisco into The Northern Trust Carbon Ecosystem, aiding in the creation of carbon credits.

Additionally, Northern Trust is working closely with Mangrove Systems, a digital measurement, reporting and verification (dMRV) solution provider, and The Carbon Removers, a UK-based project developer focused on capturing and sequestering biogenic carbon. Together, they aim to automate and expedite the verification of carbon credits generated by The Carbon Removers’ facilities, such as those located at a Scottish distillery. The automatic collection of real-time data through Mangrove’s dMRV system allows for a faster process in mapping this data against certification protocols, ultimately leading to the generation of carbon credits via the Northern Trust ecosystem.

Tom Dickie, the Chief Executive Officer of InceptionX, remarked, “The Northern Trust Carbon Ecosystem provides us with a set of solutions that allows us to securely create carbon credits in near real-time on behalf of our project developer clients, enabling them to transact those credits in a shorter timeframe.”

Meanwhile, Brandon Vlaar, Chief Executive Officer of Mangrove Systems, noted that the ecosystem will retain essential data parameters needed for verification and traceability, enhancing transparency in verified carbon credits while reducing the time required for registration. Sanjay Parekh, Chief Commercial Officer of The Carbon Removers, underscored the importance of detailed information in ensuring transparency, stating, “Having the capability to capture specific information like the date, location and flow rate for every carbon credit we capture and sequester allows us to ensure that the buyers of our credits can see the full lifecycle of each credit created – providing full transparency and traceability.”

The Northern Trust Carbon Ecosystem was formally launched in September 2024, marking its entry with the first live transactions. This ecosystem aims to connect institutional buyers with project developers dedicated to climate solutions that contribute to the reduction or removal of greenhouse gases. Utilizing private ledger digital blockchain technology, buyers can now purchase digital carbon credits directly from project developers and retire them against their emissions footprints, with Northern Trust acting as the designated custodian to record, transfer, and settle these digital carbon credits.

The Northern Trust Carbon Ecosystem is supported by the firm's digital assets platform, Northern Trust Matrix Zenith™, reinforcing its ongoing commitment to innovation in asset servicing. This milestone supports key lifecycle events associated with digital assets, ranging from asset creation and trading to custody and reporting.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.northerntrust.com/united-states/pr/2024/northern-trust-launches-digital-solution-for-institutional-voluntary-carbon-credits-with-first-official-live-transactions> - This URL supports the launch of The Northern Trust Carbon Ecosystem and its role in the Voluntary Carbon Market, including the first live transactions and the use of blockchain technology.
* <https://www.northerntrust.com/united-states/pr/2023/northern-trust-developing-digital-platform-for-institutional-voluntary-carbon-credit-transactions> - This URL provides information on Northern Trust's development of a digital platform for voluntary carbon credit transactions, highlighting its collaboration with project developers and the use of blockchain technology.
* <https://www.fif.com/index.php?option=com_content&view=article&id=24943&catid=78&Itemid=1749> - This URL corroborates the launch of The Northern Trust Carbon Ecosystem and its functionality in facilitating digital carbon credit transactions.
* <https://www.northerntrust.com/about-us/company-overview> - This URL provides general information about Northern Trust, including its history and services, which supports the context of its involvement in the carbon credit market.
* <https://www.northerntrust.com/united-states/pr/2023/northern-trust-developing-digital-platform-for-institutional-voluntary-carbon-credit-transactions> - This URL further details Northern Trust's efforts in developing a digital platform for carbon credits, emphasizing its role in streamlining processes in the Voluntary Carbon Market.
* <https://www.northerntrust.com/united-states/pr/2024/northern-trust-launches-digital-solution-for-institutional-voluntary-carbon-credits-with-first-official-live-transactions> - This URL highlights the role of Northern Trust Matrix Zenith in supporting the lifecycle of digital assets, including carbon credits.
* <https://www.northerntrust.com/united-states/pr/2023/northern-trust-developing-digital-platform-for-institutional-voluntary-carbon-credit-transactions> - This URL mentions Northern Trust's collaboration with various project developers, which aligns with the partnerships mentioned in the article.
* <https://www.fif.com/index.php?option=com_content&view=article&id=24943&catid=78&Itemid=1749> - This URL supports the involvement of specific companies like Water Recovery Systems IP Limited and CUT Carbon Distributed Technologies AG in the Northern Trust Carbon Ecosystem.
* <https://www.northerntrust.com/united-states/pr/2024/northern-trust-launches-digital-solution-for-institutional-voluntary-carbon-credits-with-first-official-live-transactions> - This URL provides quotes from key figures like Pete Cherecwich and Justin Chapman, highlighting the significance of The Northern Trust Carbon Ecosystem.