

**BLOCKCHAIN FOR  
CARBON CREDITS**

**AND THE ROLE OF  
DIGITAL ASSETS  
TOKENISATION**



# INTRODUCTION

■ In collaboration with Chintai, a licensed and regulated digital asset platform based in Singapore, and DNZ ClimateTech, Hubbis recently organised an exclusive discussion event at the China Club in Hong Kong. The focus of this round table centred on exploring the pivotal role of tokenisation in advancing the carbon credits market. Additionally, the conversation extended beyond this area to encompass a broad spectrum of climate change-related topics and the tokenisation of various financial assets.

*The underlying premise revolves around the transformative potential of blockchain technology and tokenisation while addressing challenges in digital assets such as distribution, transparency, custody, secondary market liquidity, and pricing.*

*David Packham, CEO of Chintai, shared his insights during the event and, at the same time, actively gathered the guests' diverse perspectives from decision-makers in the wealth management sector, banks, investors, and advocates for specific products or markets, including the carbon credits domain.*

*Hubbis has distilled key insights from the discussions into a focused Q&A with David, setting the stage for further exploration. This report includes noteworthy observations from David and other guests regarding the evolution of tokenisation and its practical applications in carbon credits and impact investing. It also extends to a broader context, encompassing various real-world assets that would benefit from tokenisation.*

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[View David Packham's LinkedIn Profile](#)

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## AN INTRODUCTION AND OVERVIEW FROM CHINTAI CEO DAVID PACKHAM

### *The Q&A At a Glance*

The Carbon Credits market is fragmented and inefficient and would benefit from a more standardised, liquid, and transparent model.

Chintai can issue carbon credit tokens on a blockchain, significantly enhancing liquidity, transparency, verifiability, compliance and trust in the market.

Developments such as these are at the forefront of helping expand the global carbon market, which for now is voluntary in terms of origination, but could become mandatory in the future, which would elevate the market to another level entirely.

There are many other logical extensions of tokenisation in climate mitigation, such as a hydrogen market. Beyond this, there are numerous areas of real-world assets, both physical and financial, that can be tokenised and therefore handled more efficiently than conventional methods.

Chintai's platform is licensed and regulated in Singapore, lending it great credibility as a FinTech for digital assets. Chintai's platform offers comprehensive solutions for issuance, secondary trading, and compliance for digital assets such as real estate, bonds, carbon, funds, equities and more.





intermediaries and advisors in a number of ways.

They could use tokenised carbon credits to diversify their clients' portfolios. Carbon credits are a new and innovative asset class that is uncorrelated with traditional asset classes, such as stocks and bonds. This means that adding tokenised carbon credits to a portfolio could help to reduce correlations, cut overall risk, and potentially improve returns.

Wealth managers can introduce their clients to an exciting avenue through which to invest in a dynamic global carbon market that is expected to grow rapidly in the coming years, as governments and businesses around the world implement policies to reduce greenhouse gas emissions. The advisors will therefore be ahead of these developments and will gain credibility by having opened the door to such investments in tokenised carbon credits and thereby participate in the significant growth ahead.

**THE Q&A IN FULL**

**Can you briefly describe the current carbon credits market and the existing market/trading infrastructure, where it is lacking (in efficiency, clarity and other areas), and why you think it urgently needs to be improved/enhanced?**

The carbon credits markets offer mechanisms to facilitate the globally mandated reduction in greenhouse gas emissions and help achieve global climate goals. However, the current market is fragmented and inefficient. To address these limitations, governments and market participants need to work together to develop a more standardised, liquid, and transparent market. This would help to accelerate the transition to a clean energy economy.

**Can you explain what specifically Chintai can bring to the table in terms of tokenisation and blockchain protocols to enhance activity and transparency in the carbon credits market?**

Chintai brings the following innovations and advantages. We can issue carbon credit tokens

on a blockchain, creating a more standardised and liquid 'financial' market for carbon credits than exists today in traditional markets. We can facilitate more transparent and liquid secondary markets for trading carbon, which enables buyers and sellers to trade carbon credits efficiently. Chintai also provides a compliance engine that can be used to ensure that carbon credits are traded in a compliant manner; this helps to build trust and confidence in the market.

**Exactly where do you see tokenisation, for example relating to carbon credits, applying to or being adopted by wealth management intermediaries and advisors, and why?**

Tokenisation, for example, relating to carbon credits, has the potential to be adopted by wealth management

**Is this as yet only for accredited investors and is there as yet real end-demand from HNW and UHNW investors, or what needs to happen for it all to fall into place?**

At present, in Singapore, where Chintai is based and regulated,







develop new financial products and services based on them.

## What do you think Chintai offers that is differentiated and unique that will encourage such parties from the wealth management community to work with you rather than another platform?

Chintai is a real-world digital asset tokenisation platform that offers a number of unique features that make it well-suited for wealth management intermediaries and advisors.

Our focus on tokenising real-world assets, such as carbon credits, hydrogen assets, and clean energy assets, makes it more attractive to wealth management firms that are looking to invest their clients' funds in a diversified manner into a variety of tangible assets with real-world value.

Our platform is licensed and regulated in Singapore, which we believe offers us additional credibility as Singapore is a robust jurisdiction in terms of regulatory and compliance standards. This

these markets are only open for accredited investors, expert investors and institutional investors because these typically relate to deals of relevance to them. However, at the moment carbon is not a regulated asset, so there is potential for retail clients to participate in these markets in the future, either for financial returns as part of their portfolios, or perhaps for their own offset requirements. And again, investors interested in this asset class will need to seek out subject matter specialists to gain more insights, especially with potential risks associated with carbon credits.

physical assets such as bonds, equity funds, derivatives, or perhaps combining the two, such as in the form of 'green' bonds and other financial instruments, low energy or 'green' buildings, and so forth.

The advantages are clear. There is the prospect of increased liquidity and transparency, it reduced costs (of issuance, of investment and of trading), and there is the potential to evolve new business models, for example, peer-to-peer marketplaces for trading these assets or to

## Aside from carbon credits, what other areas related to climate mitigation could be significantly enhanced by this type of evolution, for example perhaps related to hydrogen and more broadly, clean energy?

In short, the answer is many. Chintai's platform can be used to tokenise a wide variety of assets of all types, climate mitigation related, or other more straightforward financial or



is especially important for all management intermediaries and advisors who are subject to strict regulatory oversight, and who cannot afford to become involved with firms that do not deliver the levels of operational credibility and corporate governance.

We have a comprehensive suite of solutions for the issuance, secondary trading, and compliance of tokenised assets, making us a one-stop shop for wealth management firms that are looking to invest in tokenised assets.

Chintai's platform is easy to adapt to, use and navigate, making it ideal for wealth management firms or asset managers that are not familiar with blockchain technology.

In the traditional and also the new 'digital' financial marketplaces, these are all vital attributes and advantages that any properly managed wealth advisors would want to see in place.

**You mentioned the strength of the regulatory environment in Singapore, where you are headquartered. Expanding on that theme, what regulations are there to both encourage and oversee these types of developments and in your view, which jurisdictions are forging the path ahead in the evolution of digital assets/tokenisation?**

As I said, Singapore is very much an imaginative but careful regulatory environment. Elsewhere, in the best-regulated centres, jurisdictions such as the US, the EU, Switzerland, and the UK are developing comprehensive regulatory frameworks for digital assets and tokenisation, both to encourage innovation and protect investors.



The US SEC has proposed a new rule to define which digital assets are considered securities, while the EU is developing MiCA to provide uniform rules for digital assets across the EU. The UK is also developing a regulatory framework, the Financial Services and Markets Bill.

Hong Kong is another jurisdiction that is actively rolling out policies and regulations for regulated digital assets. The Securities and Futures Commission has guidelines for tokenised securities that is anchored by traditional securities markets' legal and regulatory requirements. This is an encouraging signal that Hong Kong is taking a very positive view of digital assets.

**There is oftentimes confusion as to the lines of divide between cryptocurrencies and tokenised assets. In short, how can you help clarify exactly what tokenisation represents and explain why you are so adamant that Chintai is definitely not, now or in the future, involved in cryptos?**

Tokenisation is the process of converting a physical or digital asset into a digital token on a blockchain. This allows the asset to be traded and managed more efficiently and securely.





Cryptocurrencies are digital or virtual tokens that use cryptography to secure their transactions and control the creation of new units. Chintai is not involved in cryptocurrencies because our focus is exclusively on tokenising real-world assets. These assets are backed by quantifiable underlying value, unlike cryptocurrencies, which are typically not.

### What is coming next for the Chintai platform in the foreseeable future, and what are your key priorities?

Chintai has a variety of missions to accomplish as we build out our platform, our clients, and our relationships with the advisory community and investors.

We will expand the range of assets that we can tokenise, including more clean energy assets, and other real-world assets that we believe will appeal to advisors and investors. We will help increase the awareness of and liquidity in tokenised assets by developing new trading platforms and partnering with existing exchanges.

We also aim to improve the user experience and the dissemination of information, making the platform more user-friendly and accessible to a wider range of users. We will also make further progress in advanced reporting and analytics.

Regulation is vital, and so too is compliance. Chintai will continue to elevate our governance, regulatory adherence, and compliance capabilities to ensure we meet the highest standards for all parties, especially our issuers and investors. ■



### *Key Observations & Insights*

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## KEY OBSERVATIONS & INSIGHTS FROM THE DISCUSSION

### **At a Glance:**

- » The carbon credits market, essential for climate mitigation, is in need of significant improvement. Tokenisation emerges as a solution to demonstrate the virtues and capabilities needed for transparency and efficiency. Carbon credits, which are essentially permits for companies to offset emissions, face challenges in pricing due to opacity and various other less-than-ideal factors on accountability.
- » Blockchain technology can add a layer of transparency and trust to the carbon credits market. It helps establish a clear link between the origin, certification, and lifecycle of carbon credits, addressing issues like greenwashing. Tokenisation, well-suited for the inefficiencies of the carbon credits market, offers enhanced authenticity and traceability.
- » A global shift towards Environmental, Social, and Governance (ESG) factors is reshaping the carbon credits market. Companies prioritise environmental responsibilities, contributing to the growth of carbon credits. Evolving standards, exemplified by Verra, play a crucial role in verifying and validating carbon credit projects.
- » Adherence to evolving standards, such as via the specialist non-profit body Verra, is crucial for the verification of carbon credit projects. Governments are anticipated to play a pivotal role in steering firms toward ESG-friendly initiatives, driving the growth of the carbon credits market. The trajectory of the carbon credit market appears promising, driven by ESG principles, technological innovations, and regulatory measures.
- » Tokenisation is evolving beyond network and utility tokens to fractionalise real-world assets. This includes carbon credits, hydrogen, or hard assets such as aircraft, ships, land, and real estate, or democratising access to financial assets, such as private equity funds. The mission is to make access and trading cheaper, faster, and more transparent for a diverse and truly vast array of assets that have quantifiable underlying value.
- » There is a growing acceptance of tokenisation by institutions, pension funds, and asset management firms. The wealth management community recognises the potential and logic behind tokenisation, realising that platforms and regulations are now in place.
- » Chintai plays a crucial role in the ongoing phase focused on real-world missions to improve liquidity and transparency across various assets globally. Institutions, pension funds, and asset management firms are increasingly embracing tokenisation opportunities. The wealth management community acknowledges the potential and logic behind tokenisation, recognising the presence of platforms and regulations to facilitate this evolution.
- » Regulatory bodies, including the Monetary Authority of Singapore (MAS) where Chintai is licensed, are commended for embracing innovation while maintaining high standards in blockchain technology. The delicate balance between enabling innovation and adhering to traditional regulatory frameworks is vital. The regulatory environment remains a critical factor influencing the trajectory of blockchain technology.





### ABOUT CHINTAI

Chintai is a leading one-stop solution for modernizing capital markets. Regulated and [licensed by the Monetary Authority of Singapore](#), the Chintai platform uses blockchain technology to enable traditional finance and innovative companies to harness the power of digital assets. Gain access to a robust automated compliance engine with an end-to-end white labelling solution. The product suite includes all features and functionalities to streamline business operations and create a competitive advantage for enterprises. This includes dynamic security token issuance, high-performance secondary trading and automated compliance infrastructure for regulated digital assets. The strategic aim is to bridge the gap between businesses and compliant blockchain technology with a Blockchain Platform-as-a-Service (BPaaS) model.

[chintai.io](https://chintai.io) - Leading businesses into the regulated digital assets frontier.

### ABOUT DNZ CLIMATECH

DNZ aims to drive positive change in the world of business and sustainability towards a net-zero economy. As a provider of decarbonization solutions, net-zero strategies, carbon market consultancy, and tokenization of ESG-related projects, DNZ empowers organizations and businesses to embark on a journey towards a greener and more sustainable future.

DNZ focuses on urban-based and technology-based credible climate action projects in Asia that can positively impact climate change while potentially generating financial returns. With the growing global commitment to reducing carbon emissions, this investment avenue is poised for sustained growth and offers a solution to align financial goals with a more sustainable and environmentally conscious approach.

To find out more [www.dnz.asia](https://www.dnz.asia)