A blockchain-based carbon trading platform, merging Smart contract, NFT and carbon credit to monitor, trade, also offset your carbon footprint



Dr. Kyrie LUO

CEO & FOUNDER

羅泓清博士

www.visioncarbon.net

Introducing a transparent, verifiable, traceable blockchain-based Voluntary Carbon Credit Trading Platform in GBA



The Huge Challenge in Green Finance



\$3T/yr Funding GAP

- × Fragmented Market
- X Multiple Intermediaries
- X No Standardization
- × Financial Risk
- × Project Risk
- X Market Risk

X Reputational Risk

\$1T Investment recorded in 2023 Only 20% of the total requires

>>



Trillions more dollars of climate finance investment is needed to maintain **1.5°C** pathway



碳信用市场 绿色债券 绿色借贷

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Carbon Market Background



Blockchain for Scaling Climate Action

WHITE PAPER APRIL 2023

Carbon Market Opportunities for Hong Kong Preliminary Feasibility Assessment March 2022



Investment and Finance

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What is carbon credit?



EXHIBIT 2: Main carbon standards

Standards Market share		Name of credit	Geographical scope	Sectoral scope	
Verified Carbon Standard (Verra) Verified Carbon Standard VEERA STANDARC	~ 70.4%	Verified Carbon Units (VCUs)	Global (dominant in developing countries)	All project classes	
Gold Standard (GS)	~ 17.3%	Verified Emission Reductions (VERs)	Global (mostly from EU)	Most project classes except REDD+	
Climate Action Reserve (CAR)	~ 6.93%	Climate Reserve Tons (CRTs)	United States, Pilot project in Mexico	Agriculture, Forestry, energy, waste, non CO ₂ GHG abatement	
American Carbon Registry (ACR)	~ 5.95%	Emission Reduction Tons (ERTs)	United States	Industrial processes, land use, forestry, carbon capture, waste	

Source: United Nations Sustainable Stock Exchanges 2022

Current barriers to ensuring a trusted and efficient VCM



Main Problems



High commission fees



Double counting increase the risk of fraud



Low-quality carbon credits source, vintage and standards etc.



Lack of trust lack of transparency



Bad accessibility and liquidity of assets



Time-consuming for end-buyers Complex Carbon management



Problems

- Existing carbon trading system is high cost of transaction (20-30% commission fees from lots of brokers and retailers)
- **Poor** transparency for price (High fragmentation, no price or volume signals, leading to low liquidity)
- **Double selling** of carbon credit. (No tracibility, high reputational risk)
- Lack of trust between different stakeholders resulting in high-cost and time-consuming for end-buyers.

Low-Quality Carbon credits

- Additional, Not overestimated, Not claimed by another entity, Permanent are regarded as as high-quality
- Do **NOT** clearly know about its **source**, **vintage and standards etc**. Blockchain allows we ddd transparency into supply chain of carbon credit to make sure high-quality carbon credit are provided.

China is at the lowest point of the entire carbon trading industry

- Carbon trading markets and standards are all in foreign countries,
- China has created huge emission reductions for the global carbon market. After being purchased at a **low price** by developed countries, it is packaged and developed into financial products with **higher** prices for trading abroad.

China VCM do NOT open for International investors or individual investors

- Hong Kong as an International Financial Center can explore how to develop into a regional carbon trading center for international investors.
- Good liquidity.

Net-zero emissions & Carbon neutralization by 2060

- Many businesses find they **cannot fully** eliminate their emissions, the challenge is especially **tough** for organizations that aim to achieve **net-zero** emissions and good **ESG** performance.
- Hong Kong **government** are consent to achieve **net-zero emission** and **carbon neutralization** by 2060. By Establish regulations is ineffective and costly for achieve the goal of carbon neutralization.

Our solution

Global Trading

Carbon Credit-backed Token subscription, issuance, transaction, offset. Tamper-proof High transparency Extremly low commis<u>sion fees</u>

Carbon Calculator and Labelling

Calculate the life cycle carbon footprint of their product or service



Carbon Monitoring

Traced at each step of the carbon credit supply chain from issuance,verification offset and all the way to the endbuyers.

STO (Security Token Offerings)

Creates digital tokens supported by certified carbon credits, widely Open for institutional investors and retails globally

Traditional Carbon Credit Issuance Process VS Tokenization Process



Achieve ESG and sustainability goals



A truly distributed and borderless solution for commodities trading

Frace	Clear There End November 13, 2020				
Start October 5, 202 Oc					
-	1	,		-	
Supply chain view Pradu	ict alway				
					Expand of Colleges at
0	Generator	Standards	Project developer	Validator	Buyer
PROPONENT	1508	8	2000	15	2
NAME	Manoa Farm	CCER	Jinyan Energy Technology Co., Ltd	China Classification Society Cartification Company (CCSC)	EzAZpbYogwpNDsxdoddDZNRb P8qdLSTaVVkeGTmKU8zCg/Vq
	Sichuan Liangshan forests project	Verta	PSW AMMS GHG Mitigation Project in Nanyang City	Shenzhen CTI International Certification Go., Ud (CTI)	0x713x535ewrwrD3aD6Ba14ct2 404530034A16268045FF
DOUNTRY/AREA	Katingan Peatland Restoration and Conservation Project	Gold Standard	Muyuan Foods Co., Ltd.	SCS Global Services	
CHEDITING PERIOD	Central Kalimantan Peatlands	Plan Vivó	BCCY Environmental Energy CO ,LTD	Tuev Nord Cert GmbH (Tuev Nord)	
Search Clear Sear	Chocó-Darién Bioregion	ICROA	Solar Environmental Energy CO.,LTD	Aster Global Environmental Solutions	

et With-	Generator - TokenkegQieZyiNwAJENeBKPFXCWuBvI9Sa622VQ5DA	
Accounts	Validator - 3HVzrdhG2kuxy8dhCL8ux6aNyoFHJwDqPygeaQ12VurQ (vmazv	
	Project developer - 5fPgberHaw2kEmh6avjksQCd5cRwCSsogmdFNigEZCm (Wittake	
	Buyer – EzAZpbYggwpNDHkDZ8RoP8gsL5ToYYke0TmKU6z0giVg (militik) (age) (mi Par	5
	Price 100 HXQSM5, agricul P	
	Standards HXQSM/5oM2kurFAAk3T4Qi/Vh7Hkz8rT7AdkFey]ag1cLr	

Making sure high-quality carbon credit are provided



Our MVP





















Location: Hong Kong Farm: Mui Wo, Organic farm Farmer: Jenny Date: 05/06/2022 Species: Maesopsis eminii Project: Vision carbon

现阶段合作方木林天然資源





中國森林資源以西南部為最豐富,同時我們也將發展目標拓展至實含豐富森林資源的大灣區攀贏和南美 洲蘇利南(約5百萬畝),成為中國乃至全球最大固碳量開發商及碳匯供應商

NUT STREET, STOLEN

- ➢ 2022第4季至2022年第三季跟第一批林權合作(於陝西商洛的 20萬畝林權)。
- ▶ 碳匯計量認證工作需時12-18個月,銷售在認證後6個月内。
- ▶ 固碳量 (未來10年) : 1噸 x 10年 = 10噸/畝

		價格	陝西商洛	雲南寧蒗	四川涼山
林權面積(畝)		0	200, 000	300, 000	240,000
炭匯(噸)/畝	10				
炭匯產生量(噸)/年		0	2, 000, 000	3, 000, 000	2, 400, 000
價格(人民幣元/噸)	¥50				
炭匯總值(人民幣元)		¥0	¥100, 000, 000	¥150, 000, 000	¥120, 000, 000
銷售費用	2. 5%	¥0	¥2, 500, 000	¥3, 750, 000	¥3, 000, 000
國內碳匯計量認證費用	¥80	¥0	¥16, 000, 000	¥24, 000, 000	¥19, 200, 000
		¥0	¥18, 500, 000	¥27, 750, 000	¥22, 200, 000
炭匯淨值(人民幣元)		¥0	¥81, 500, 000	¥122, 250, 000	¥97, 800, 000

Carbon Market



The Federal Government has reformed the Safeguard Mechanism to put Australia's largest industrial emitters on a pathway to net zero by 2050. The updated scheme commenced on 1 July 2023, capturing around 219 facilities responsible for almost a third of the nation's emissions. CCM

VCM



A report published by Hong Kong Exchanges and Clearing Limited in January 2023 highlights the "huge opportunities" for the development of Hong Kong as a regional carbon trading centre and super-connector bridging international investors and Mainland China's carbon markets through its carbon market platform, Core Climate.



India is expected to launch a domestic VCM in 2023 and a domestic CCM in 2026 pursuant to its Energy Conservation (Amendment) Act 2022.



Indonesia is expected to launch a national CCM in three phases between 2023 – 2030. The country is also expected to launch a national VCM as well as implement a carbon levy.



In July 2023, the Malaysian Ministry of Finance began a feasibility study in collaboration with World Bank in relation to the potential implementation of a carbon pricing instrument. This accompanied the Minister of Economy's launch of the first phase of Malaysia's National Energy Transition Roadmap.



In June 2023, the Ministry for the Environment, the Ministry for Primary Industries and the Ministry of Business, Innovation & Employment issued a public consultation seeking feedback on proposed changes to the design of New Zealand's national emissions trading scheme.



In July 2023, the Ministry for Ecology and Environment published draft interim measures in respect of the anticipated relaunch of China's national VCM. Industry sector coverage under China's national CCM is expected to expand beyond the power sector in the near term to include petrochemicals, chemical engineering and steel.



Singapore's Climate Action Data Trust Data Dashboard is set to launch in Q3 2023 and will allow users (including individuals, consultancies, carbon credit suppliers, project developers, international organisations, verification bodies, media and civil society) to access carbon credit data free of charge. Details of Singapore's international carbon credits framework are also expected to be announced in the second half of 2023.

Carbon Market price & size

Global demand for voluntary carbon credit could increase by a factor of 50 by 2030, by factor of 100 by 2050

Carbon credit price





Best time to Invest in Carbon via Blockchain



What makes us different from others?

Efficiency

Within 0.02% commision fees. Reduces administrative burdens 02

04

Healthier and more open markets

Trades are settled instantly Everyone can purchase or sell



01

Liquid marketplaces

Create deep liquidity Carbon Pools

Eliminate double counting

Make double-counting claims easy to spot

05

Better financing for developers

Bring pre-purchase agreements onto

a public ledger, generate good pricing data and signals

06

Fractionalization

Smaller than 1 metric tonne More accessible





CEO Kyrie Luo Ph.D University of Cambridge Sustainable Finance HKUST Certificate in Sustainable Finance 联合国可持续发展高级ESG策略顾问 上海能源交易所碳信用交易许可 7 year+ coding experience Blockchain Developer.





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第三屆粵港澳大灣區傑出青年企業家 最佳科技創新獎 第九届中国国际互联网大学生创新创业大赛-铜奖 2023金融科技奥林匹尔竞赛 金奖& 最佳跨境交易金融区块链方案 2023 松山湖港澳青年创新创业大赛 -最佳技术创新奖 2022 香港数字资产马拉松 银奖 2022 金融科技大奖 最佳区块链方案 2023中小企智創營商大獎 - 傑出中小企可持續發展(ESG)獎 **TADS Awards 2022 Impact ESG NFT Award**

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已获奖项照片















媒体报道



城大生應用金融科技創「願景碳 」 促 進碳信用額交易 推動全球碳中和

By Sponsored Content on June 16, 2023

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羅泓清(右)與何婉盈(左)在金融科技提案比賽中相識,繼而成為初創企業Vision Carbon的拍檔。



在Web3.0的推進下,人工智能、區塊鏈、雲端運算和大數據等應用在金融 上的科技發展一日千里。由香港城市大學主辦,運豐全力支持的「金融科技 奧林匹亞2023」以推動及培育粵港澳大潭區金融科技人才為目標,今年吸 引了來自大灣區18間大專院校的94支隊伍參賽,最終由香港城市大學的隊 伍「Vision Carbon」贏得金獎。除伍其中兩位成員Kyrie及Christine 分享 在比賽過程中,除了免費參加一系列培訓課程,還有機會翻取業界領袖的 處見和指導去效良參賽提案,亦為他們所成立的初創公司發展打好基礎, 提供了獨一無二的機遇。



城大初創團隊於粵港澳大灣區傑出青年企業家獎項嘉許

2022年09月29日

由香港城市大學(城大)培育投資的四家科創企業和初創公司,於日前舉行的第三届考港澳大灣富企業來聯盟杰 出青年空旗家旗機負種獲得多個環境,其中,由城大大型當新創業計劃「HKTech 300」孵化的三家功創公司成 功奪得「氟佳科技創新獎」,而城大校友。晶准醫學(Cellomics)聯合創始人兼首席技術官條濃博士,更經獲淵 「杰出青年企業」與填。

第三屆專港澳大灣區企業家聯盟杰出青年企業家頒獎與禮於日前(9月21日)於香港、深圳、澳門三地同步舉行 並總行直播,香港部分由香港特別行政區行政長官**李家超先生**擔任主播裏實。













• 科技娛樂 科技趣聞

金融科技奧林匹亞 2023 圓滿落幕 城大 隊伍以區塊鏈碳交易平台奪冠





THANKS!

Climate change is not a problem for tomorrow or the future, it is a problem for today, now.

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