

Carbon Credits today can be traded in two different carbon markets



Compliance Carbon Markets

Government-regulated systems where companies are legally required to purchase carbon allowances to meet emission caps.

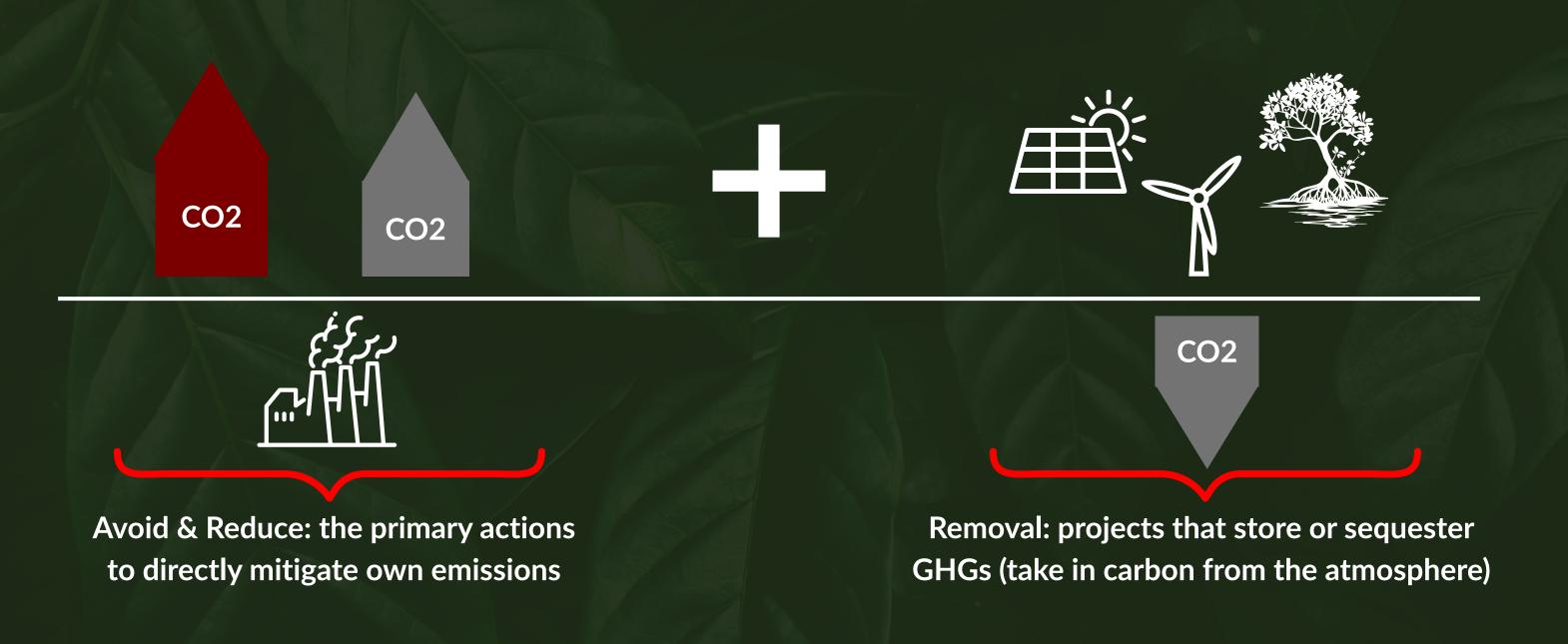


Voluntary Carbon Markets

Market-regulated systems that allows individuals and organizations to buy carbon credits on their own accord to offset emissions and support climate projects

BACKGROUND

One carbon credit is equivalent to one ton of CO2, and can be used to avoid, reduce or remove carbon



BACKGROUND

KlimaDAO focuses on solving three key problems within the voluntary carbon market today



#1: Poor Liquidity

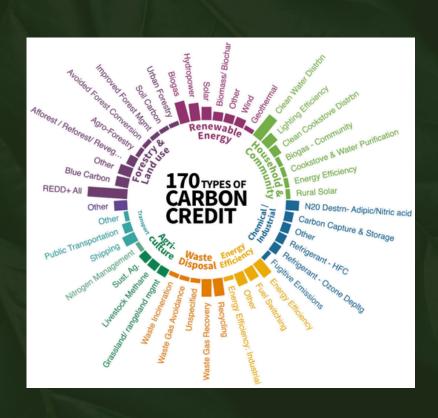


#2: Poor
Transparency



#3: Poor Regulation

Problem #1: Poor Liquidity



Over 170 Types of Carbon Credits



Only 5 Centralised Exchanges Globally

Problem #2: Poor Transparency



Mostly Traded Over the Counter



No Unified Tracking of Carbon Credits

Problem #3: Poor Regulation



No Global Regulatory Body



Limited Enforcement

Our expert interviews verified the key problems



Kenneth Chan
Legal Counsel
(Global LNG and Emissions)
Aramco Trading Company

"The voluntary carbon market today indeed suffers from poor liquidity, limited transparency, and fragmented regulation. Credits are often disputed due to verification issues and weak oversight, like the C-Quest scandal where 5 million credits were cancelled. Legal consistency across borders is hampered by diverse registries and standards, and the market still relies on fragile infrastructure led by NGOs like Verra. Project data remains opaque, with remote locations and inconsistent third-party reporting making independent verification a major challenge."

KlimaDAO seeks to solve the key problems of liquidity, transparency and regulation through...



#1: Tokenisation



#2: Blockchain



#3: DAO

#1: KlimaDAO issues \$Klima as common currency for carbon credits to improve liquidity



Users deposit tokenized carbon credits (e.g. BCT, NCT)



Klima issues a newly minted \$Klima token to the users



\$Klima becomes the common currency for carbon credits over time

#2: KlimaDAO operates through the blockchain to improve transparency



All transactions recorded on blockchain



Klima's treasury is fully visible on chain



Smart contracts enforce payment and agreements

In particular, Klima operates on Base Network, which runs on the Ethereum Blockchain

Layer-2

Blockchain

Ethereum Network



Optimistic Rollups

OP Stack

#3: KlimaDAO is organised as a DAO, with users able to vote on Klima's governance to improve regulation



Any user can submit proposals



Users can vote on Klima's direction



No central authority within the DAO

KlimaDAO also provides other benefits to its users and builders



Users can earn interest by staking carbon credits



Users can choose to retire carbon to cut emissions



Builders can build on KlimaDAO's infrastructure

How many of you would be interested in purchasing the Klima Token?

Save the environment

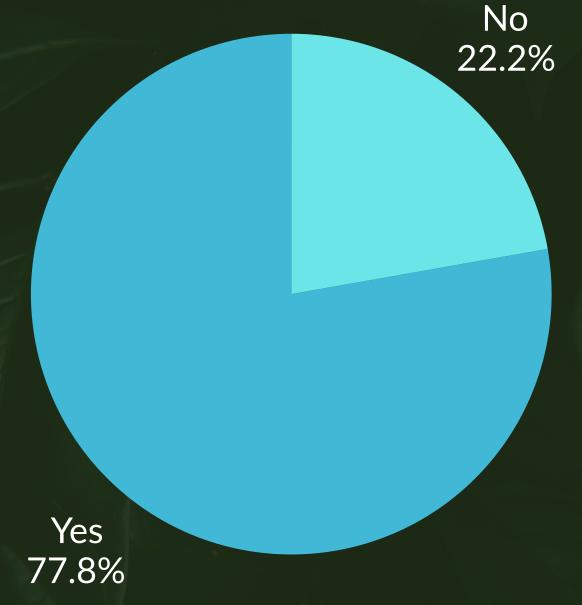


Earn
Money

According to our survey results, 78% expressed interest to buy carbon credits to earn interest

Would you be interested to buy carbon credits and use it to earn interest?

n = 36



The majority of this was because of the dual benefits of saving the environment and earning interest

"Win-win! Fight climate change and make money!"

"Combines environmental impact with financial value, which is more appealing"

"Passive income for a good reason"

"If it is profitable, why not?"

"Side income while doing good for the environment"

"More money is good"

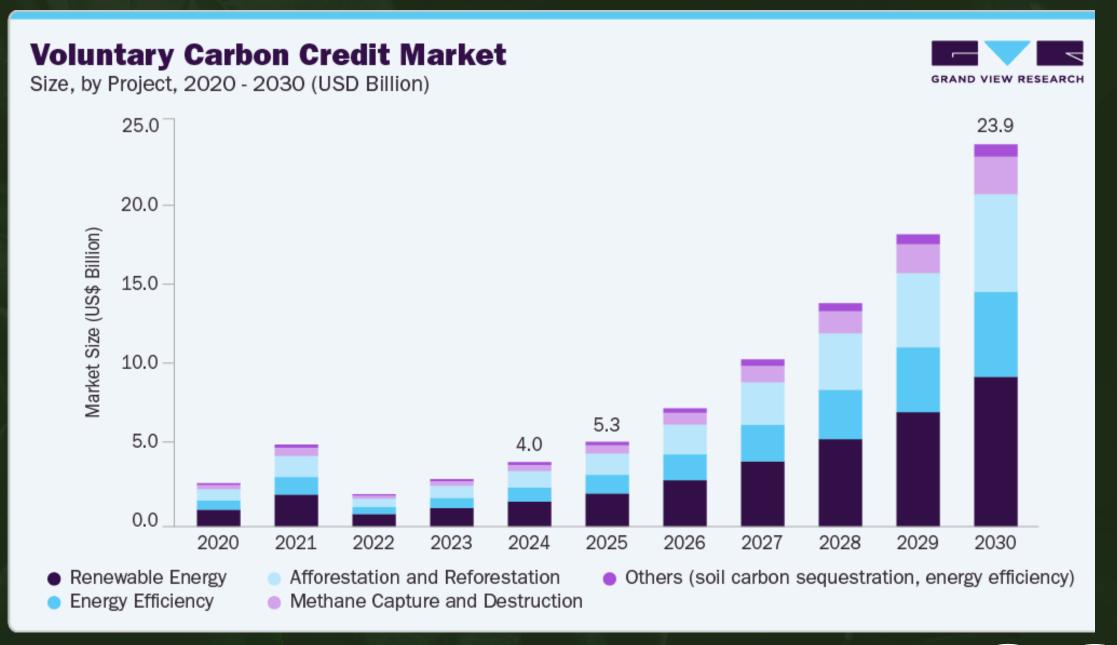
"Earn interest sure"

"Will consider to buy carbon credits as long if it provides returns"

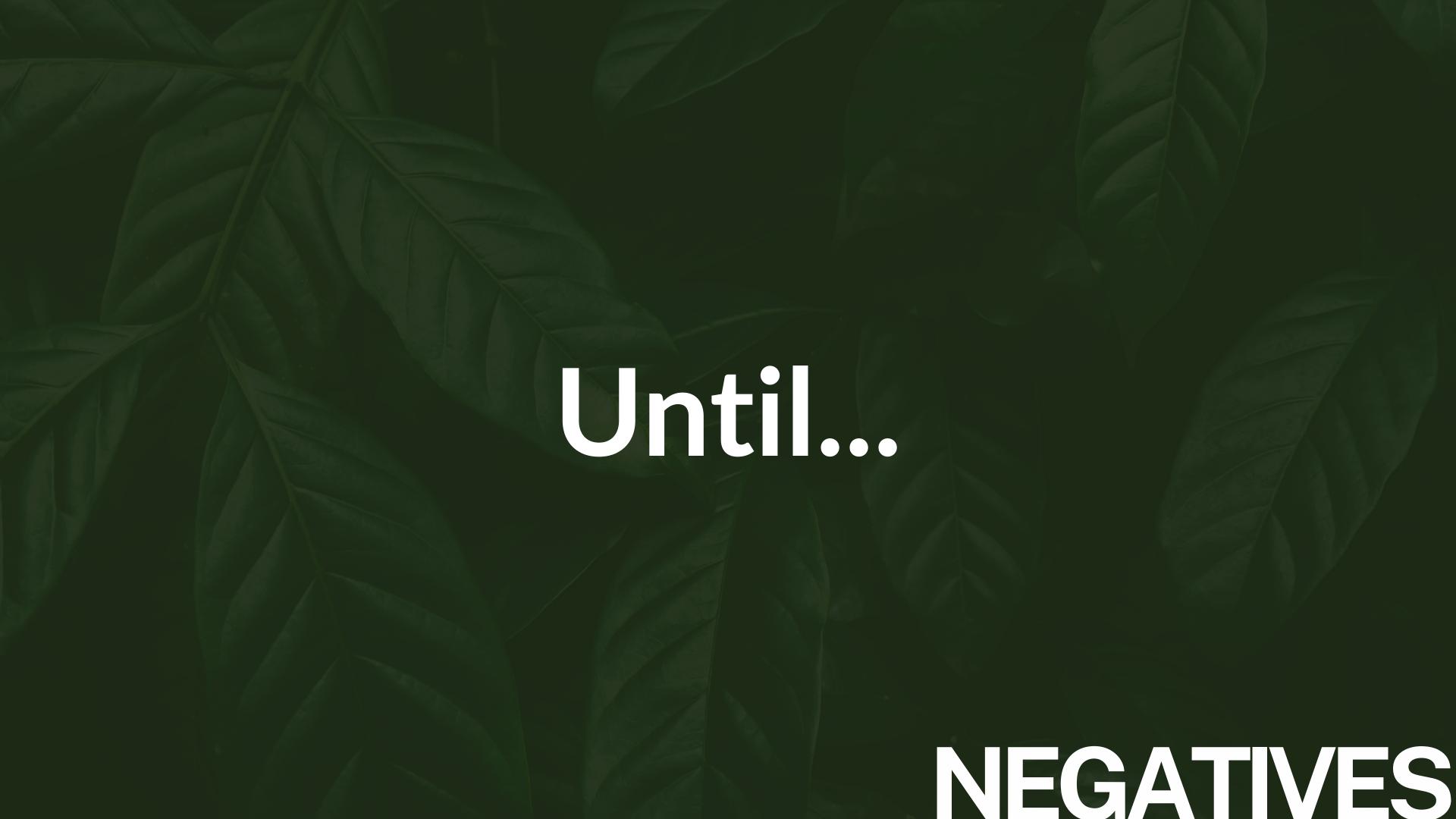
It is unsurprising then that Klima's price surged over 1,261% within the first month of its launch in 2021



Part of this can also be attributed to expectations in the growth of the voluntary carbon credit market



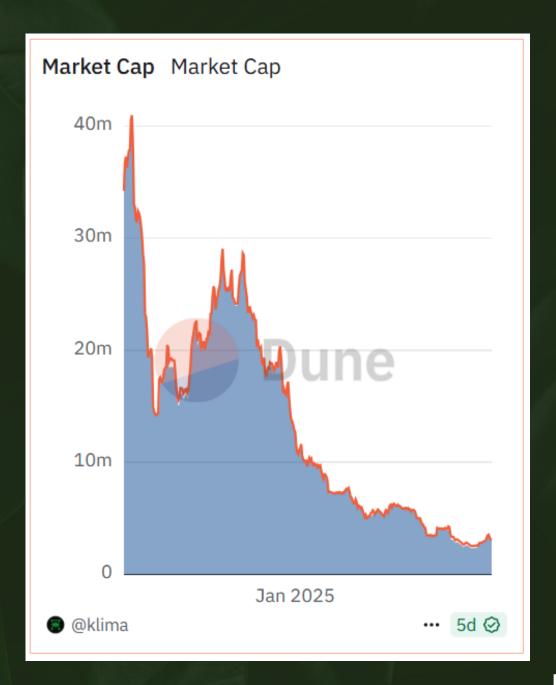
All looks good right?



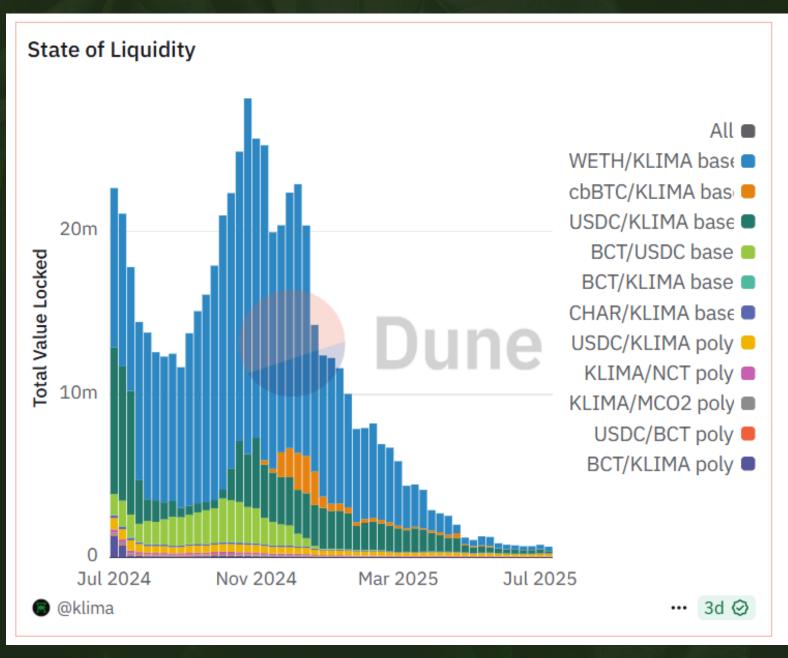
KlimaDAO has dropped from \$6.82 to \$0.08, which represents a 98.8% fall over four years

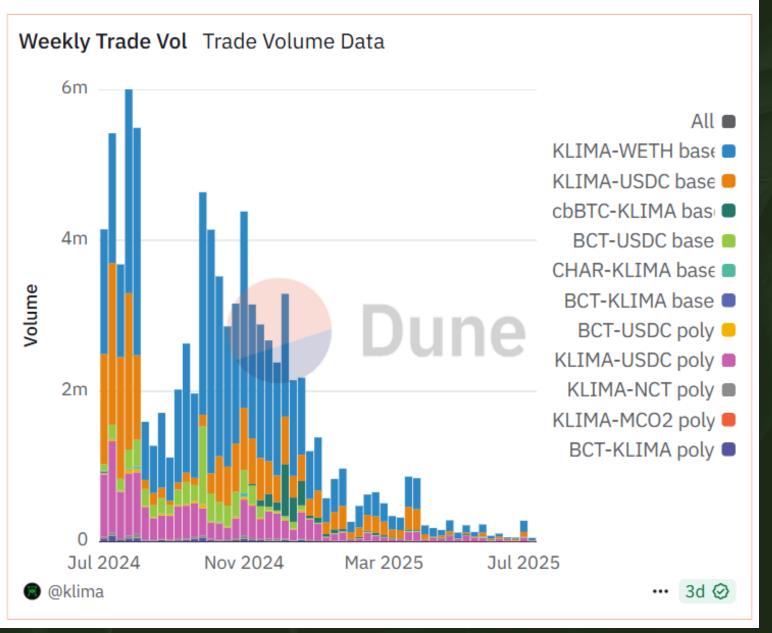


Its market capitalisation has also plummeted correspondingly with the price decrease

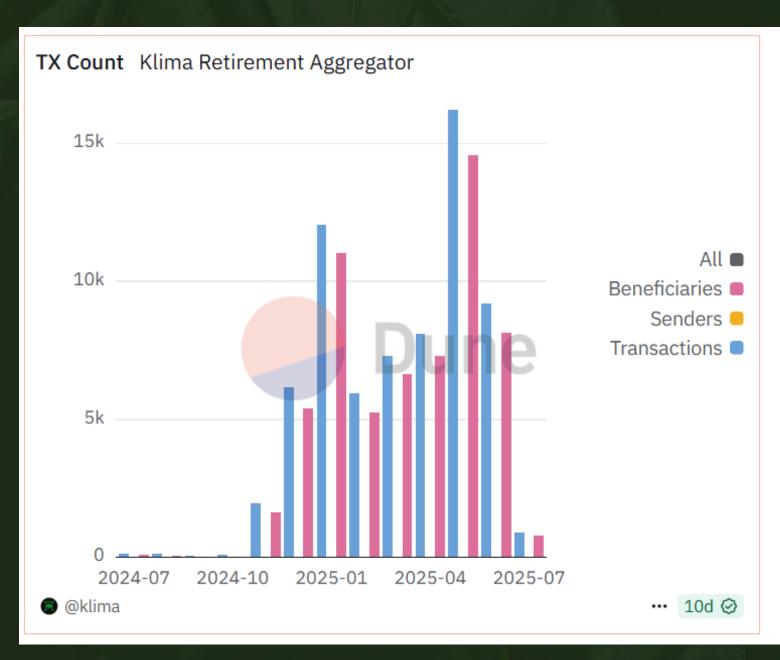


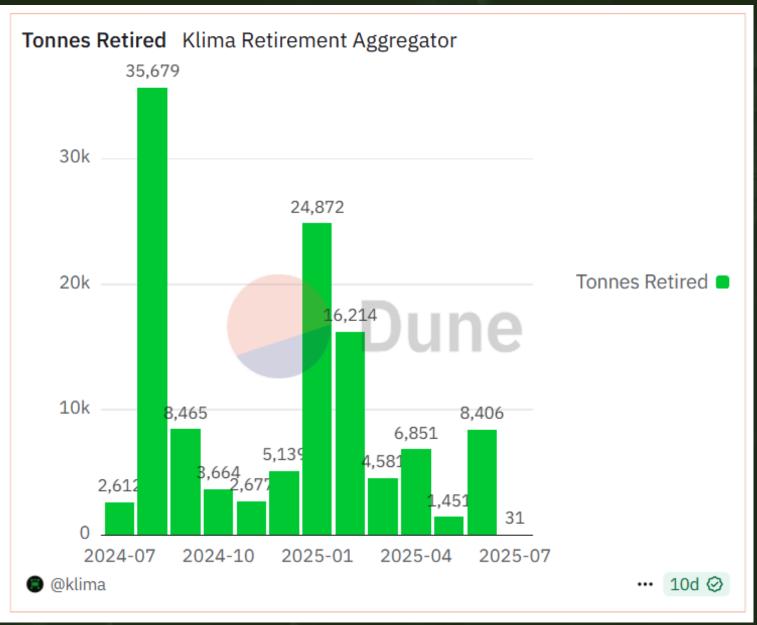
Its liquidity and trade volume has also plummeted over the past year



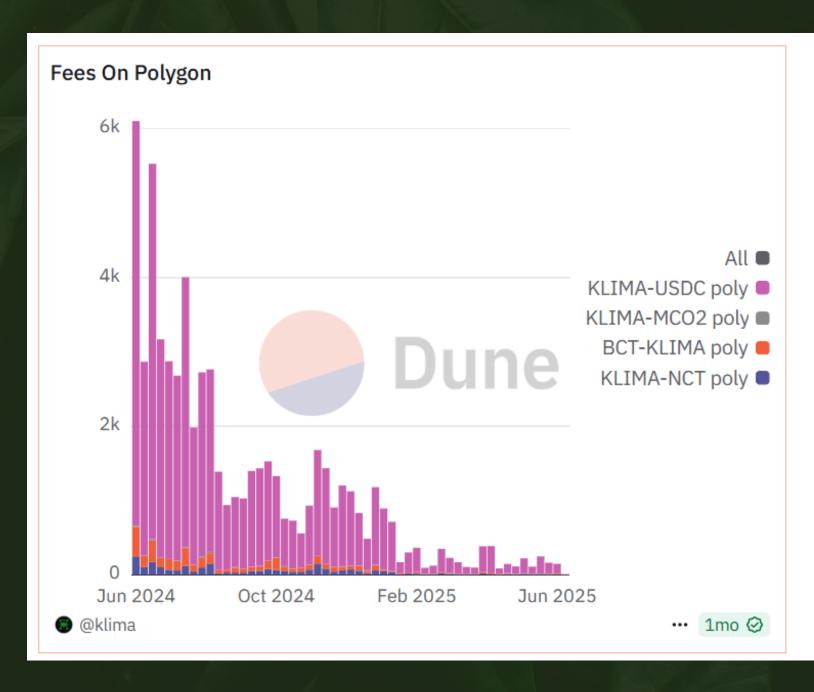


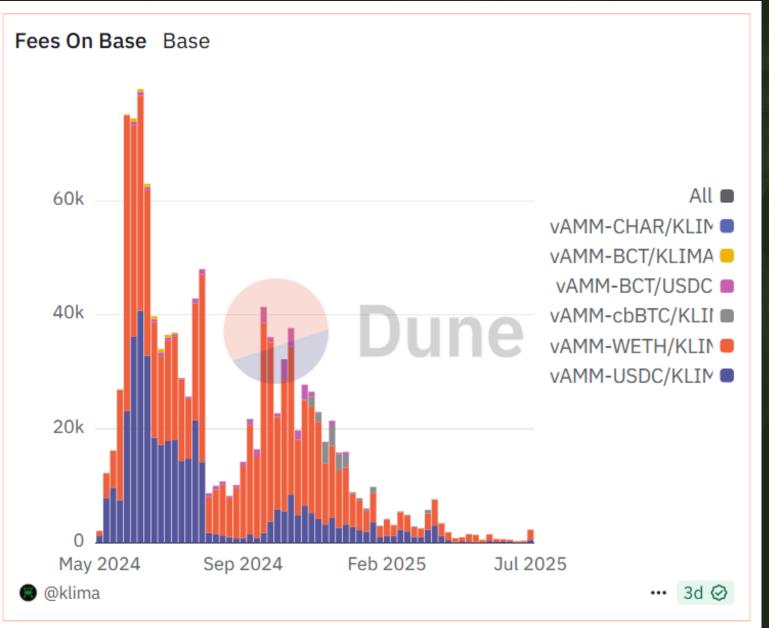
The amount of carbon that it has retired has also fallen



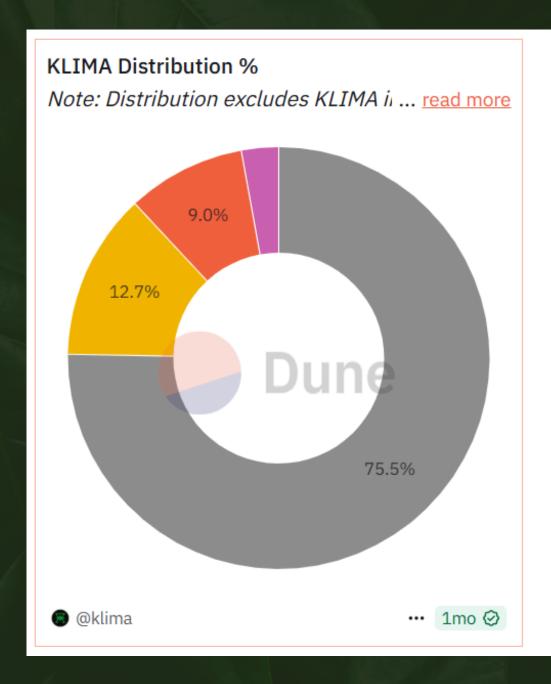


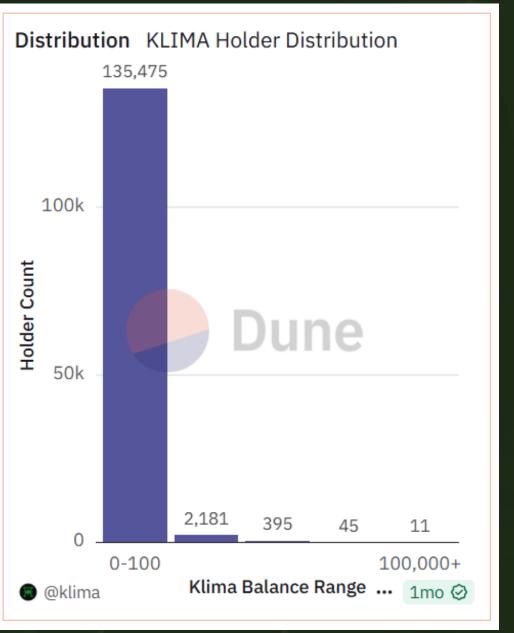
Correspondingly, the fees that it has collected has also plummeted





Importantly, over 99% of Klima tokens continue to be held by the first 100 holders





KlimaDAO's performance today can be considered average at best



Market Cap ~\$2.9 Million



Total Locked Value ~\$3.4 Million



Treasury Size ~\$11.6 Million



Developer Activity

5 Active Developments

So what went wrong here?

Let's look at 5 possible reasons

We studied this through two expert interviews and two user opinion surveys



Kenneth Chan
Legal Counsel
(Global LNG and
Emissions), Aramco
Trading Company



Joshua Sum
Head of Product,
Solayer Labs
Founder, College
DAO



Market Opinion
Survey
n = 36



User Interviews on Discord n = 5

Reason #1: KlimaDAO does not really solve the problem that it seeks to solve

| Problem | Assessed Effectiveness | Strengths | Issues |
|----------------------|---------------------------|--|--|
| Poor Liquidity | Minimal | Did introduce a common token to reduce carbon credit variety | Did not improve liquidity due to low adoption |
| Poor Transparency | Minimal | Did allow all transactions to be viewed centrally on chain | Did not solve the verification of carbon credits off-chain |
| Poor Regulation | Minimal | Did introduce a governance body for KlimaDAO | Did not solve the broader regulatory and policy issues on carbon credits |

The same sentiment was also echoed by our expert

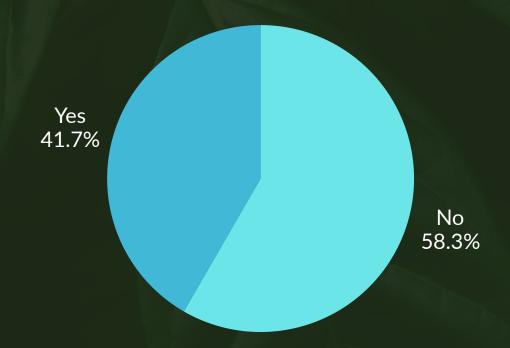


Joshua Sum
Head of Product, Solayer Labs
Founder, College DAO

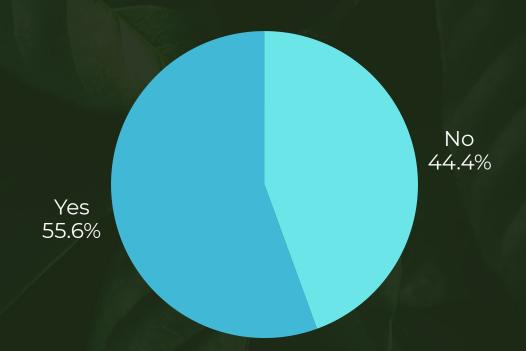
"The issue with KlimaDAO is that it does not really address the liquidity, transparency and regulation issue. It was not able to maintain sufficient liquidity since the adoption rate was low. KlimaDAO is also not exactly transparent because while all transactions are recorded, it is impossible to verify whether the carbon credits meet the required standard. Finally, the DAO itself does not achieve better regulation. It can be easily manipulated and majority may not always be right in deciding what is good.

Reason #2: KlimaDAO does not really appeal to users well

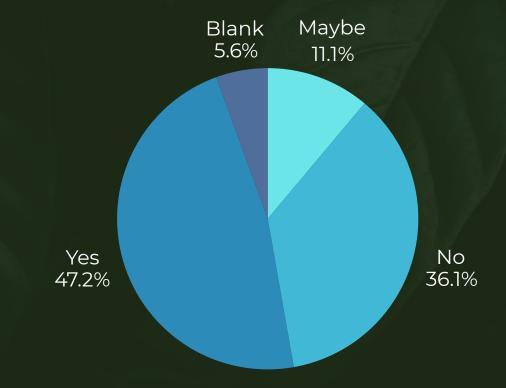
Only 42% of users are willing to trade carbon credits



This increases in willingness to retire carbon



But actual users willing to try remains low at 47%



Users who were not interested were concerned about reliability, accessibility, knowledge and cost-benefit

"Arbitrary and open to fraud"

"Not my area of expertise"

"Too complex"

"Not familiar with carbon credit trading and the idea is too conceptual for now"

"No regulatory need, nor financial benefits"

"Absurd concepts"

"Not interested"

"Still lack of knowledge but also accessibility to them"

Reason #3: KlimaDAO does not really stand out from the opposition

Other Tokenised Carbon Credits Available

KlimaDAO's Unique Features May Not Appeal





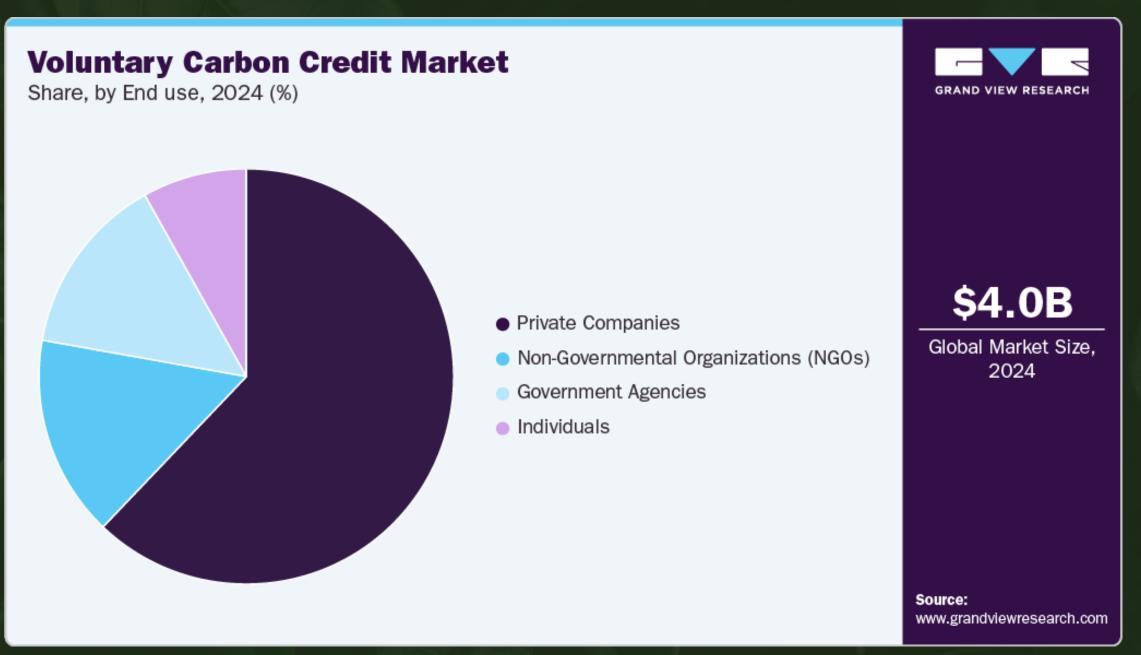








Reason #4: KlimaDAO does not really appeal to businesses who are the biggest players



KlimaDAO may not resonate with businesses because the "perceived costs" may be higher



BusinessInterests

Seen to be offsetting emissions, while maintaining costs

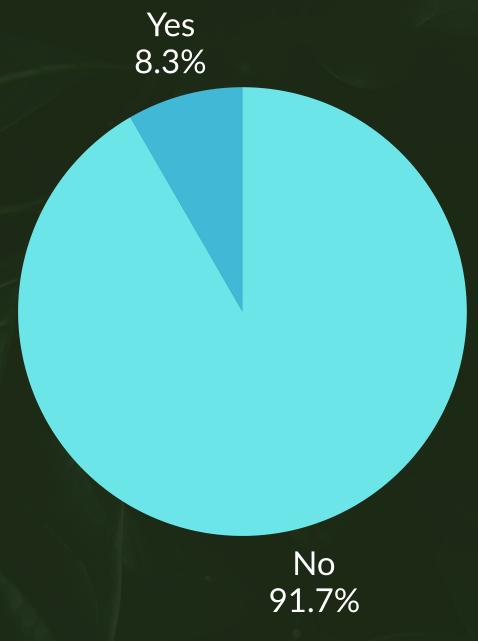


KlimaDAO's
Offerings

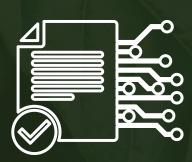
Complete transparency, businesses must pay "full price" for carbon credits

Reason #5: KlimaDAO is anchored on altruistic behaviour, which will not attract users

Do you consider yourself a climate activist?



There are also potentially regulatory and technological concerns



Smart Contract Risks

By nature are immutable, cannot account for every scenario or automatically adapt to changes in laws or regulations.

In 2023 when Verra paused tokenization due to regulatory pressure, KlimaDAO's protocol could not respond to external changes in time and had to halt bonding of tokenized carbon credits.



Evolving Regulatory Gaps

Regulatory frameworks for crypto and carbon markets vary by country and are still evolving which could impact KlimaDAO.

Exposed to legal risks including imperfect Verra oversight, restrictions in terms of access, staking and issuance of tokens due to non-uniformity of laws across jurisdictions.

We think that KlimaDAO could be improved by refining its core value proposition and target market



Redefine it as a financial product

Position it as a climate risk hedge for both individuals and businesses, especially if governments later do not take climate change seriously



Redefine it as being about providing market access

Position it as a tool to allow individuals to have better access to carbon credits, and target individuals who want it but do not have access currently



Redefine their target audience to focus on businesses

Refine its features to better cater to businesses, for e.g., in providing greater publicity of businesses using it to reduce carbon emissions

RECOMMENDATION

KlimaDAO is taking some of these steps in developing Klima 2.0



Improved Liquidity

- Establishment of Carbonmark to make buying carbon credits more user-friendly
- Launching of KlimaX as an Automated Market Maker



Improved Transparency

• Standardised carbon asset classification, enabling liquid forward contracts with quarterly settlement cycles



Improved Regulation

 Appreciation based model and establishment of Klima Foundation to engage legally and financially with traditional institutions

RECOMMENDATION

But the effect is likely to be minimal in our view, given that it does not target demand

No Focus on Generating
Demand

Product
Features

RECOMMENDATION



Randolph Lee, V Divya, Mihika Gandhi, Tang En ci Nathan, Pranav Ramachandran, Olivia Tang Shu Hui