



Join us

Sign in

# How a carbon-backed cryptocurrency is tackling climate change

Jul 12, 2022





Cryptocurrency has exploded in growth – so has its environmental impact.  
Image: Freepik.com

**Gabriel Kent**

Product Lead, KlimaDAO



**Listen to the article**

8 min listen

---

A carbon-backed, algorithmic currency aims to change that by driving climate action.

---

- **The responsible development and regulation of digital assets will be crucial for a green economy.**
- 

Over the last decade, cryptocurrency has exploded in growth, onboarding around **300 million new users**. This exponential growth has been accompanied by serious environmental side effects stemming from energy intensive activities such as Bitcoin mining – which by some estimates, consumes as much electricity as a small country each year – and transacting on proof-of-work networks, including Ethereum. Of course, outside of crypto, many activities we engage in every day, such as transacting within the **traditional financial system**, all have a carbon footprint, reminding us that carbon dioxide knows no borders.

For our community, we should not just point out the discrepancies in attention and outrage directed at cryptocurrency energy consumption – for context, Bitcoin uses 62 terawatt hours of energy each year, while household tumble dryers are responsible for 108 TWh in the United States alone – we also need to highlight the utility that blockchain protocols are providing.

## Cryptocurrency that offsets carbon

At **KlimaDAO**, for example, we are aligning economic incentives for a green regenerative economy, making on-chain carbon retirement accessible to all. KlimaDAO's native token "KLIMA" can only be minted when tokenized carbon credits are locked away in its treasury. This is achieved by offering incentives to users to exchange tokenized carbon in return for KLIMA at a discounted price. The KLIMA token is itself backed by carbon. As the KlimaDAO treasury acquires more carbon over time through its incentives, any newly minted KLIMA tokens are distributed to those who hold KLIMA themselves.

---

SushiSwap. This means for the first time, anyone can participate in the carbon economy without needing to use a third party broker to source, or offset, carbon. In the current voluntary carbon market (VCM), it takes several months for an organization to source carbon credits, work with a brokerage, and retire those credits – often in over-the-counter exchanges that occur in private and result in price opacity and market inefficiency.

## Have you read?

- [Why the debate about crypto's energy consumption is flawed](#)

---

However, KlimaDAO's retirement aggregator tool, part of the [Klima Infinity](#) suite, allows any individual or institution to select their preferred carbon credit, choose the number of credits to match specific offsetting needs, and then retire them – all on-chain, recorded on a public ledger on the blockchain, and in a matter of minutes. Founded in October 2021, KlimaDAO has already brought over \$100 million worth of VCM liquidity on chain. In addition to allowing anyone, anywhere to purchase a desired number of credits and retire them, KLIMA holders can also personalize a [love letter](#) to the planet to commemorate their climate-positive actions.

Looking under the hood, KLIMA is backed by a variety of different carbon assets that are held in KlimaDAO's treasury, including Moss's MCO2 and Toucan Protocol's BCT. The KLIMA token itself is instrumental for the Klimaconomy; it doesn't just act as an incentive for users to lock carbon in the DAO's treasury, it also acts as a "trading pair" within the DeFi markets. This means that KLIMA is used to facilitate market trades across different types of tokenized carbon assets.

[Show more](#) 

By using KLIMA as the dominant trading pair for transacting carbon, and with KlimaDAO responsible for providing the liquidity in these markets, we are now seeing an efficient, liquid and transparent market for carbon emerge. As users transact, trade, and offset carbon assets at market prices, the utility of KLIMA scales. Through the growth of diversified carbon assets, KlimaDAO intends to create the best experience to source and retire carbon assets.

## How will regulation change the industry?

Regulation has long been a hot topic in crypto. However, President Biden's [recent Executive Order](#) calling for the responsible development and regulation of digital assets, specifically refers to exploratory efforts to investigate the environmental benefits of distributed technologies. This landmark Executive Order shows that governments are beginning to recognize that the debate around cryptocurrency and the environment should not focus just on energy consumption, but on positive projects like KlimaDAO that are bringing much needed transparency and liquidity to carbon markets.

We welcome the opportunity to engage with regulators as we aspire to bridge the gap between real-world carbon consumption and crypto, thus bringing us closer to the truly regenerative economy the world needs.

*This blog is part of an Agenda series led by the [World Economic Forum's Crypto Impact and Sustainability Accelerator \(CISA\)](#) which explores issues at the nexus of policy, sustainability, and social impact to help bring about a systemic, inclusive, and effective approach to governing distributed ledger technology.*

---

Accept our marketing cookies to access this content.

These cookies are currently disabled in your browser.

[Accept cookies](#)

### Don't miss any update on this topic

Create a free account and access your personalized content collection with our latest publications and analyses.

[Sign up for free](#)



#### License and Republishing

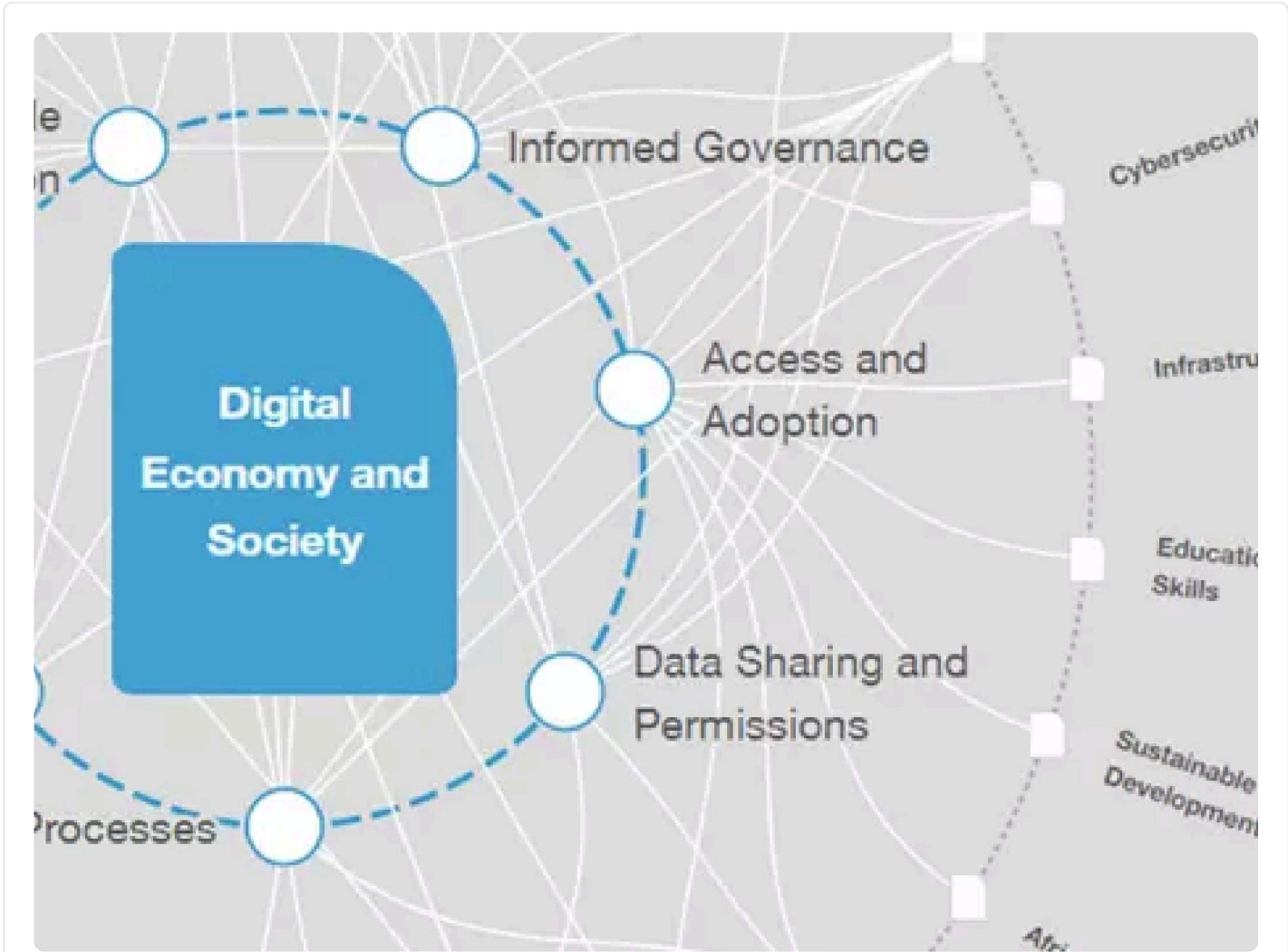
World Economic Forum articles may be republished in accordance with the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Public License, and in accordance with our Terms of Use.

The views expressed in this article are those of the author alone and not the World Economic Forum.

**Stay up to date:**

Follow +

Share:



### THE BIG PICTURE

Explore and monitor how **The Digital Economy** is affecting economies, industries and global issues



---

## Forum Stories newsletter

Bringing you weekly curated insights and analysis on the global issues that matter.

[Subscribe today](#)

### **About us**

[Our mission](#)

[Our Institutional Framework](#)

[History](#)

[Leadership and governance](#)

[Our Impact](#)

### **More from the Forum**


[Centres](#)

[Meetings](#)

[Stakeholders](#)

[Forum stories](#)

[Press releases](#)

 [Image gallery](#)

## Engage with us

[Sign in](#)

[Partner with us](#)

[Become a member](#)

[Sign up for our press releases](#)

[Subscribe to our newsletters](#)

[Contact us](#)

## Quick links

[Sustainability at the Forum](#)

[Careers](#)

## Language editions

[EN](#) · [ES](#) · [中文](#) · [日本語](#)

[Privacy Policy & Terms of Service](#)

[Sitemap](#)

© 2026 World Economic Forum

