

Flowcarbon™

LITE PAPER



Goddess Nature Token is  
**the first multi-functional  
crypto primitive** bringing  
institutional-grade carbon  
assets on chain

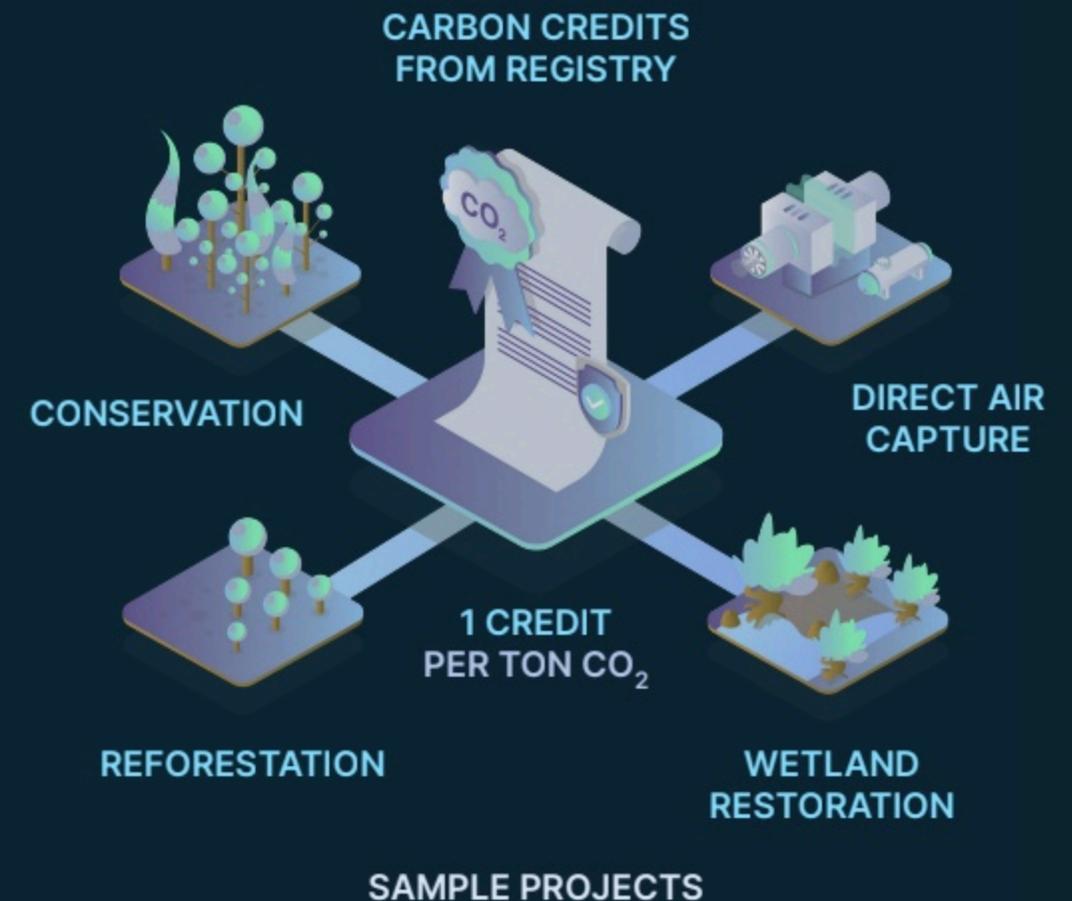




Voluntary carbon credits are transferable instruments issued to projects that **remove or reduce carbon from the atmosphere**

## Steps to Generating Offsets

1. Project is undertaken by proponent, often in nature (i.e. conservation, reforestation)
2. Carbon protected or removed by project is quantified by a third party
3. Project submitted to non-profit credit-granting registry (i.e. Verra)
4. Registry issues “voluntary credits”: digital certificates certifying that a project has avoided or removed carbon
5. Voluntary credits don’t expire until bought and “retired” by a company to offset its greenhouse gas emissions



## FLYWHEEL EFFECT



Purchasing voluntary credits is a **key solution to climate change**, financing critical climate-mitigation projects that are otherwise financially non-viable

Rising demand and price create a flywheel effect





# Corporate demand for voluntary credits has surged

Demand for voluntary carbon credits is set to **grow 15x by 2030\***

Corporate market to grow from \$300M in 2018 to **>\$20B in 2030**

Over 2,000 companies announce net-zero ambitions to achieve Paris climate goals

Nature-based projects saw **demand more than double in 2021** from 2020's already-record-high levels

## DEFINING VOLUNTARY CREDITS RESTS ON FOUR LEVERS

### Age

Recent vintage years are more valuable

### Certification

By market-recognized body like Verra

### Project Types

Nature-based projects fetch premium prices

### More Impact

Projects also protect wildlife or employ vulnerable people

## OFF-CHAIN INEFFICIENCIES

...but major inefficiencies make the voluntary market slow, difficult to scale, and keep value from project proponents

### Illiquid markets

Most transactions are OTC, fragmented across numerous selling agents

### Non-transparent, tedious price discovery

No benchmark pricing

### Value diverted by middlepersons

Numerous brokers and marketing agents between projects and end buyers

### Difficult sales cycle for corporates

Voluntary offsets not treated as commodities with clear pricing and quality ratings; instead, need for diligence, reliance on third parties, and widely variable pricing

### Closed to retail buyers

Structurally almost impossible for retail and many institutions to hold voluntary credits

### Low digitization in space

Fragmented and opaque market means little incentive for wholesale innovation



Tokenizing voluntary carbon credits is the key solution, **creating a liquid, transparent market** that anyone can access





# In just one month, on-chain carbon credits have doubled the YTD volume of traditional carbon market

## Capital Mobilized in Voluntary Carbon Market

**OFF-CHAIN**  
Traditional market

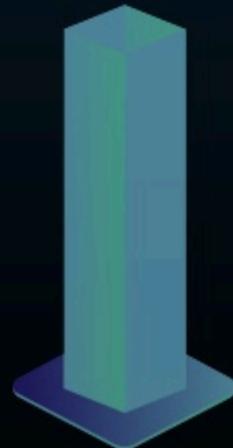
**\$1B**



2021 YTD

**ON-CHAIN**  
(Klima DAO)

**\$2B**



NOV 2021  
LAUNCHED OCT

- Off-chain market grew 100% YTD from 2020 highs, reaching record high of \$1B+ this year
- On-chain market has doubled the off-chain volume since launching in October 2021, raising the floor price of carbon credits by 10x

But demand scenarios still very limited because the carbon on-chain so far is:

- LOW quality voluntary credits with limited demand
- RETIRED, non-live voluntary credits with no off-chain value
- Lacks functional features enabling token holders to utilize the carbon effectively



# Introducing the Goddess Nature Token

## Maximizing value of real-world voluntary carbon credits on-chain

### Goddess Nature Token Key Mechanics

1. Backed one-to-one by voluntary carbon credits
2. Voluntary credits are LIVE, “unretired,” and therefore retain full off-chain value with offsetters such as corporations
3. Credits are deposited into a bankruptcy-proof SPV managed by a professional third party, with regular audits, ensuring the one-to-one ratio





# Underlying Voluntary Credit Criteria

## Recent Vintages

Our five year vintage period will roll every year. Newest vintage will be the current year vintage. Example in 2022, vintages eligible are V17-V22.

## Backed by carbon credits from one of the four market-recognized registries

Verra

## Additional co-benefits for wildlife and humans

I.e. protecting endangered habitats, employing people in the developing-world, protecting indigenous rights and lands

## Only nature-based methodologies accepted

I.e. conservation, reforestation, nature restoration

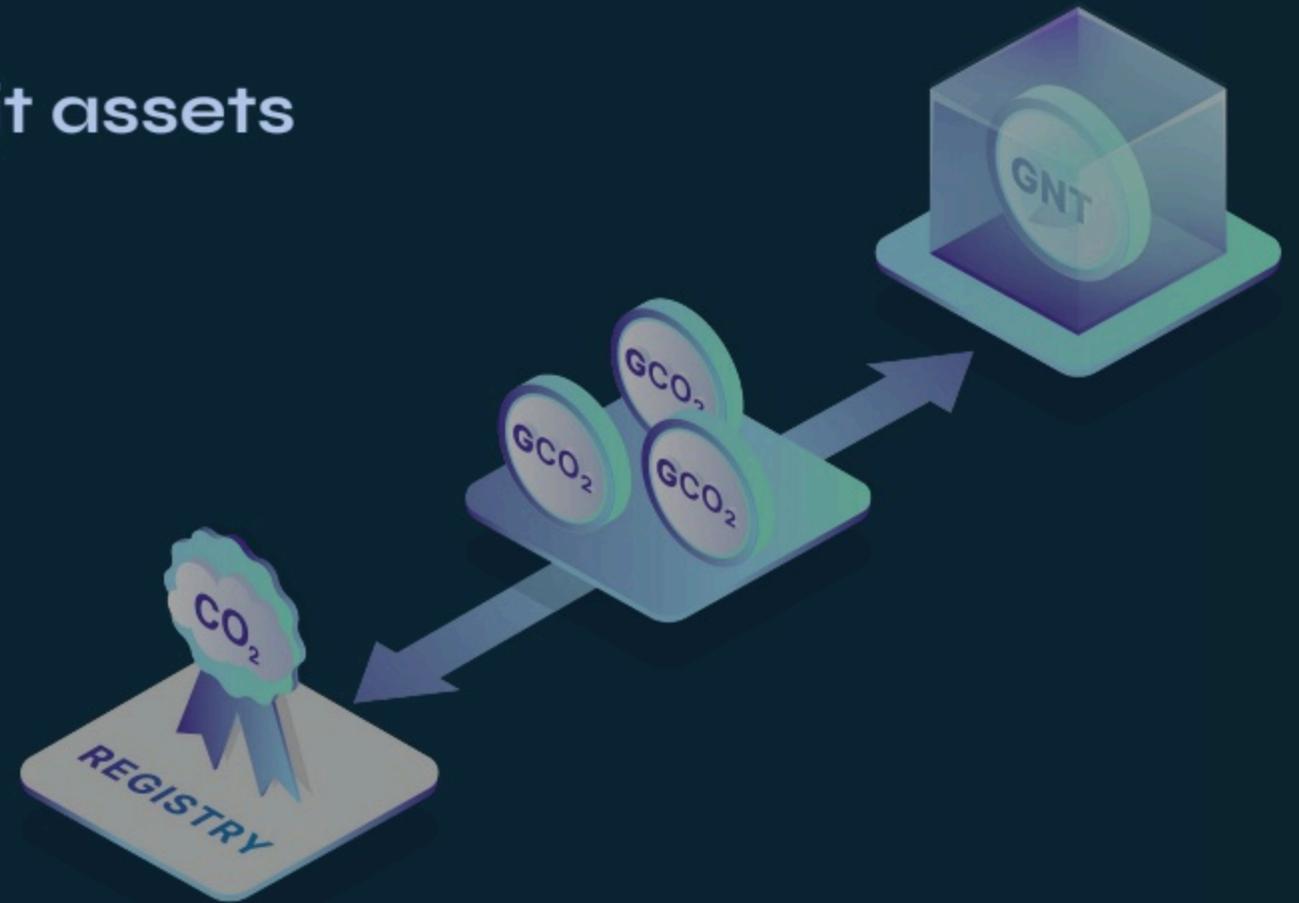


# GNT's unique attributes and real-world value make it the first liquid carbon instrument designed for corporate, retail, institutional, and crypto buyers

## GNT represents a claim on pooled credit assets

Each off-chain carbon credit will be tokenized into GCO2 tokens that are unique to each project and vintage year from which credits are sourced. GCO2s are then added to a pool with other GCO2s and “wrapped” as a fungible, tradable, liquid pool token (“GNT”) representing a claim on the pool.

This mitigates traditional project-level risk, offering safer exposure to the voluntary carbon market.





GNT's two-way bridge enables tokens to be **retired**, **unwrapped**, or **redeemed** as they move on and off the chain

1

### RETIRE

Token can be retired by token-holder on demand and claimed as a carbon offset

2

### UNWRAP

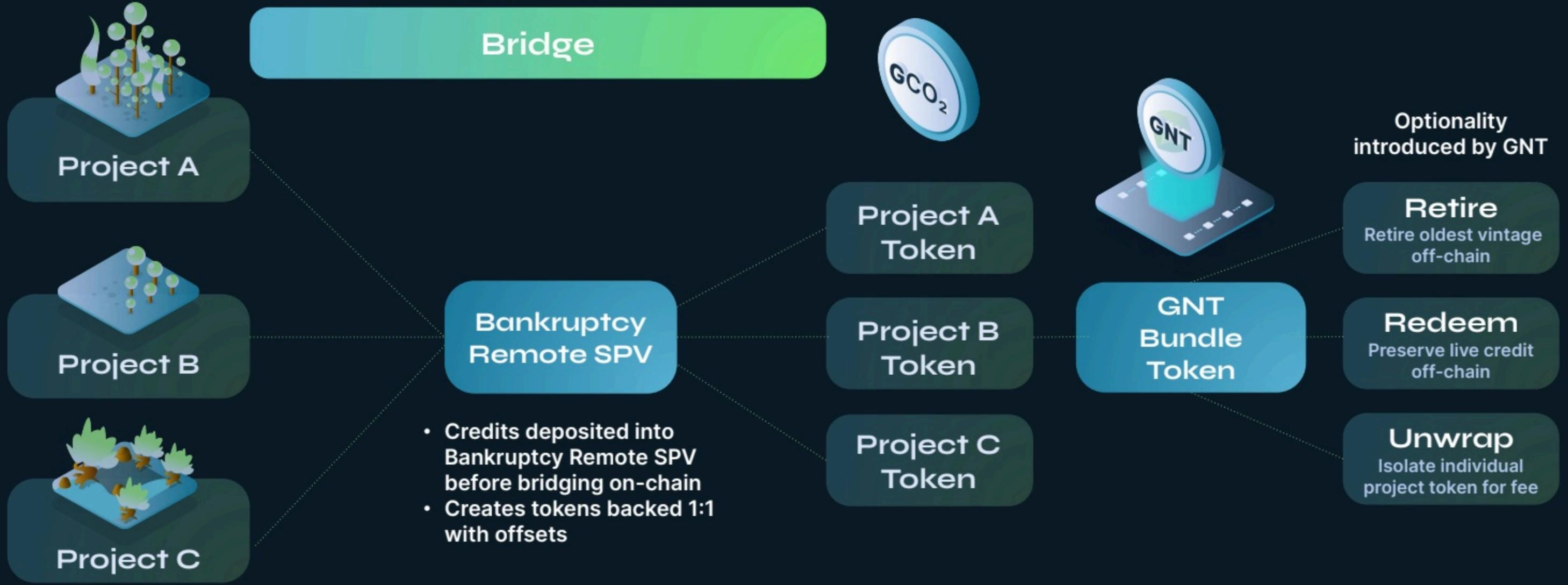
Token can be "unwrapped" back from the fungible GNT token into the underlying GCO2 representing an actual carbon credit from a specific project

3

### REDEEM

Token can be unwrapped and traded in for the underlying off-chain unretired carbon credit at any time, giving the Token holder the right of delivery of the underlying carbon credit

# GODDESS NATURE TOKEN DEEP-DIVE





**GNT is the only truly viable interoperable crypto primitive for carbon, and it's already being integrated with the world's leading protocols**





# Technical overview of the token

## Token Life Cycle

### Minting

- Verifiable with a public registry such as VERRA, using universally unique identifiers to prove that the tokens are backed by verified carbon credits

### Purchasing & Trading

- Full feature list of the ERC-20 Token interface
- Transferable and can be fractionalized
- Can be used in liquidity pools, lending protocols and every other protocol to utilize fungible tokens on EVM-supported chains

### Retiring

- Once the underlying carbon credit is used, it is "retired" and taken out of circulation
- All retired tokens accumulate transparently within the contract until they exceed a complete batch. Flow then retires the credits in the underlying registry and is again committing a tamper proof checksum as proof-of-existence

## Project Bundles & Deconstruction

### The Bundle Contract

- Projects with equal parameters can be pooled into a bundle token to allow high quality baskets of Carbon Credits
- Each bundle features the ERC-20 Token standards and enjoys full integration into existing DeFi Protocols
- Bundles will be prominently placed in liquidity pools and staking protocols

### Depositing & Withdrawing

- Each project token can be freely deposited and withdrawn from a bundle if they fit the bundle requirements
- Guaranteed 1:1 backing of each bundle token with a project token

Audited by

