natureDAO

A nature-based solution for offsetting your environmental footprint

What if NatureDAO can make forest conservation profitable?

Deforestation is a problem accelerated by a market failure

11-17% of the Amazon has already been cut down for logging, or burned to open land for cattle raising and agriculture.

The rate of global tree cover loss has doubled since 2001, to an annual loss of the size of Italy.

The only available options to monetize the forest are the economic activities that result in deforestation

Today's short term economic incentives are leading towards a market failure resulting in deforestation and often suboptimal cattle farming or agriculture.

The size of the problem

Amazon size
6.7 million km^2

Congo basin size
2 million km^2

Co2

STORED CARBON
Amazon:
123 billion tonnes

Congo basin:
46 billion tonnes

DEFORESTATION SINCE 2004
Amazon:
260,000 km^2 (approx size of New Zealand)

Congo basin:
32,000 km^2 (approx size of Taiwan)

NatureDAO wants to put nature's value at the heart of economics

A new approach to forest conservation

We are a web3, nature-based solution for offsetting your environmental footprint and keeping native forests intact. NatureDAO helps landowners and indigenous communities to monetize the assets of natural forests with sustainable revenue streams while maintaining and expanding nature protection around the world.
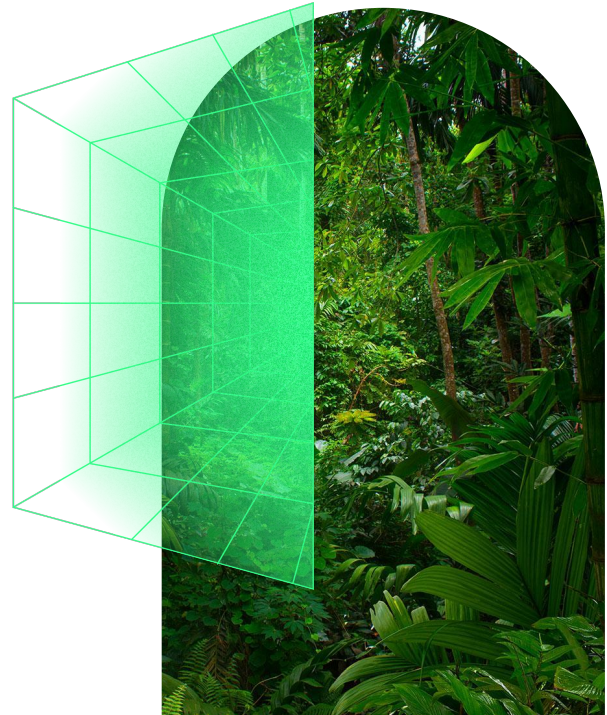
To contribute in developing a nature-based mindset to transform people, organisations and markets

NatureDAO brings a set of tools to find near-term economic rewards for protecting nature

Measure and assist in participation in carbon markets for sequestration and bound carbon

Measure and value ecosystem services, i.e. water purification and retention supporting local economy

Finance reforestation activities (purchase of land) and reward the carbon sequestration

Sustainable agroforestry e.g. medicinal plants, nuts and honey

Document, value and protect the existing biodiversity

Small scale eco-tourism

NatureDAO explained: How it works

NatureDAO signs up landowners of primary forest under threat and in need of sustainable revenue.

We preview the available areas of forest owned and protected by landowners and users can easily pick the areas they want to sponsor.

Receive a traceable digital certificate, directly linked to the hectare of forest chosen containing relevant information, e.g. carbon stored & sequestered, coordinates, key species etc.

Using detailed satellite imagery of the world's forests (1m resolution) we can verify in real time the state of the forest you are protecting and allow monthly pay-outs to the landowners.

Digital Certificate explained

A sponsor selects the parcels they want to sponsor, each parcel being equivalent to 1 Ha and represented by its unique Digital Certificate. Each certificate contains satellite imagery of the area, a unique name, artistic representation of the local biodiversity, and the following data:

1. Forest type
2. Exact coordinates of the Ha
3. Duration of the stewardship
4. Who the landowner is
5. Carbon being stored in the area
6. Key species of the area

The sponsor is free to trade, sell or hold on to the digital certificate as a proof of sponsorship. It gives the holder absolutely no right of ownership of the land itself.

Taguato ra'y ypykuéra

STEWARD
FCBC.org.bo

LOCATION
///disappointment.accursed.jigsaw

C02 STORED
~106 tonnes

FOREST PROTECTED UNTIL
01/01/2028

KEY SPECIES
Jaguar, Silk Floss, Wild Pig

FOREST TYPE
Dry Tropical woodland

KEY SPECIES
Jaguar, Silk Floss, Wild Pig

FOREST TYPE
Dry Tropical woodland

Digital certificate for each hectare

Jaguarete´i ypykuéra

STEWARD
FCBC.org.bo

LOCATION
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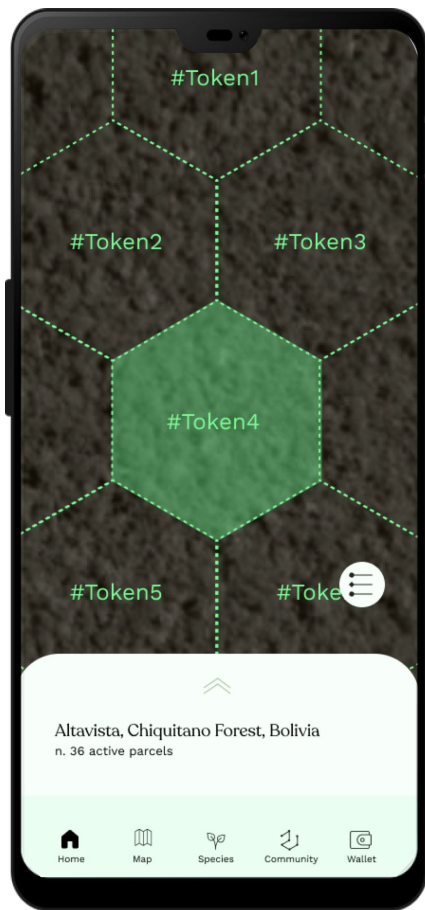
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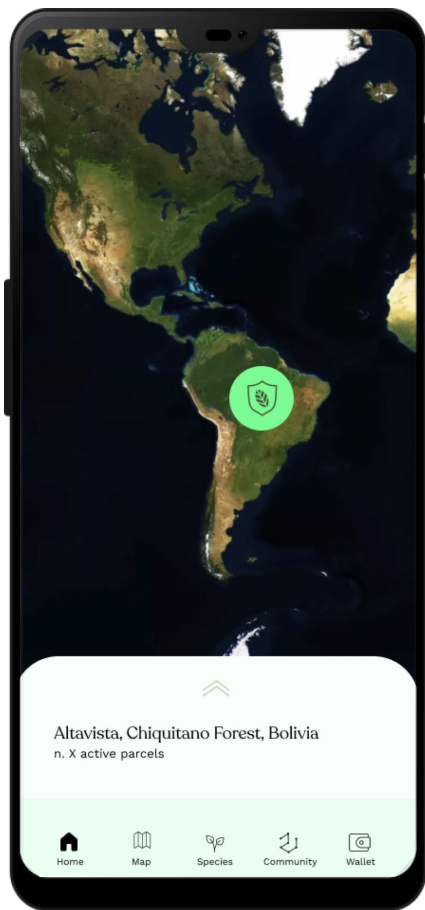
THE BENEFITS

Ecosystem wide impact

Ensuring the conservation of forest, we would be protecting the habitat of many species, positively impacting global biodiversity. We would also help preventing drought, aridification, and other climate disasters

Monitor your impact

A direct, accountable alternative to non-verifiable projects. Easily monitor the forest and validate the state of the hectares sponsored in the most accurate and rigorous way using high resolution satellite imagery.

Achieve your climate goals

A verifiable, transparent solution that saves real, existing forests from unplanned deforestations. Partner with NatureDAO to offset your environmental footprint as part of your emission reduction plan.

Owe nature nothing

A permanent, long-term offset solution that goes beyond CO2 emission reduction. By sponsoring the conservation of native forests, you are protecting the habitat of endangered species, positively impacting global biodiversity.

WHAT MAKES NATUREDAO DIFFERENT
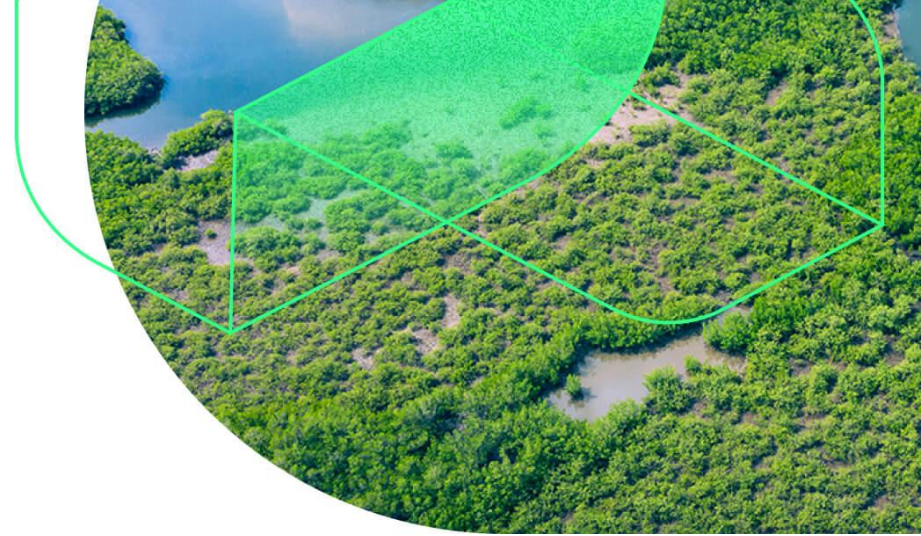
An alternative to costly, geographically limited and non transparent carbon markets that may lead to creative accounting and erosion of trust.

A focus on making sure primary forests remain intact as opposed to planting new forests, essential for the conservation nature's value

NatureDAO gives each individual the opportunity to have a direct, tangible and verifiable impact on the future of the forest.

SCALABILITY

Forest conservation is already a $24B industry. The additional volume for securing the main rainforests of the world is an additional $10-40B TAM.

The goal is for NatureDAO to handle up to 100s of million to help finance better management and allow landowners to invest in recurring revenues for forests around the world.

870M hectare

Amazon + Congo Basin rainforests

$10B - $40B

$250 – $1B Total revenue potential for NatureDAO
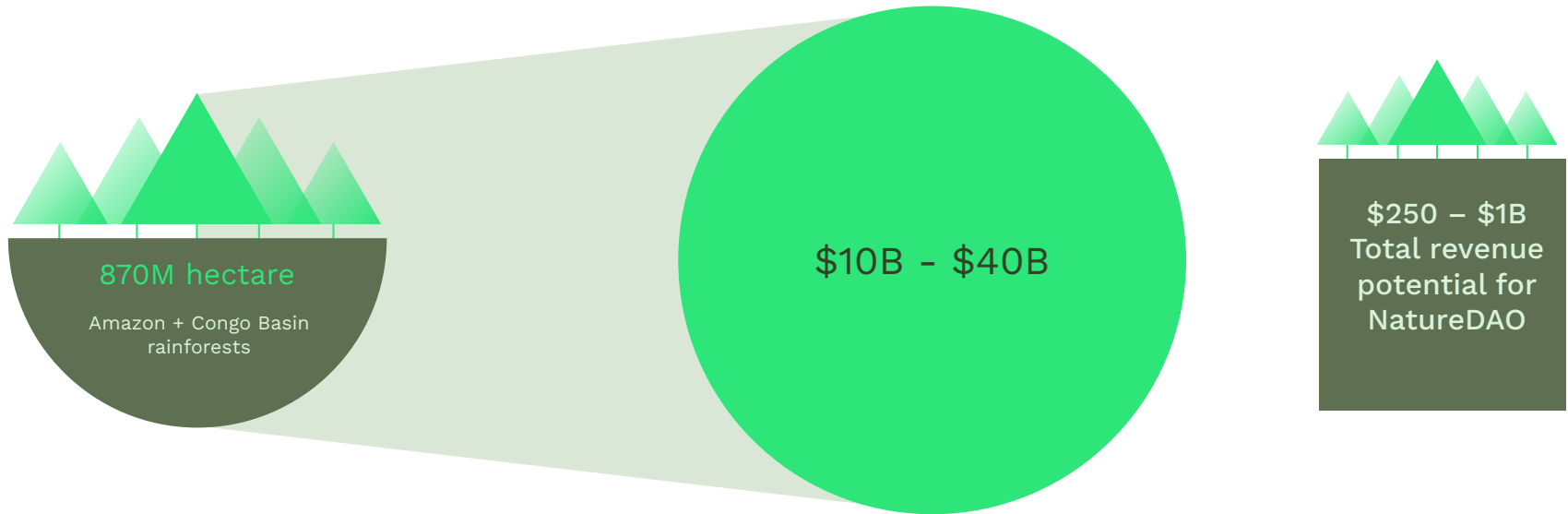
Nature-DAO roles:
Sponsors, Landowners and Validators
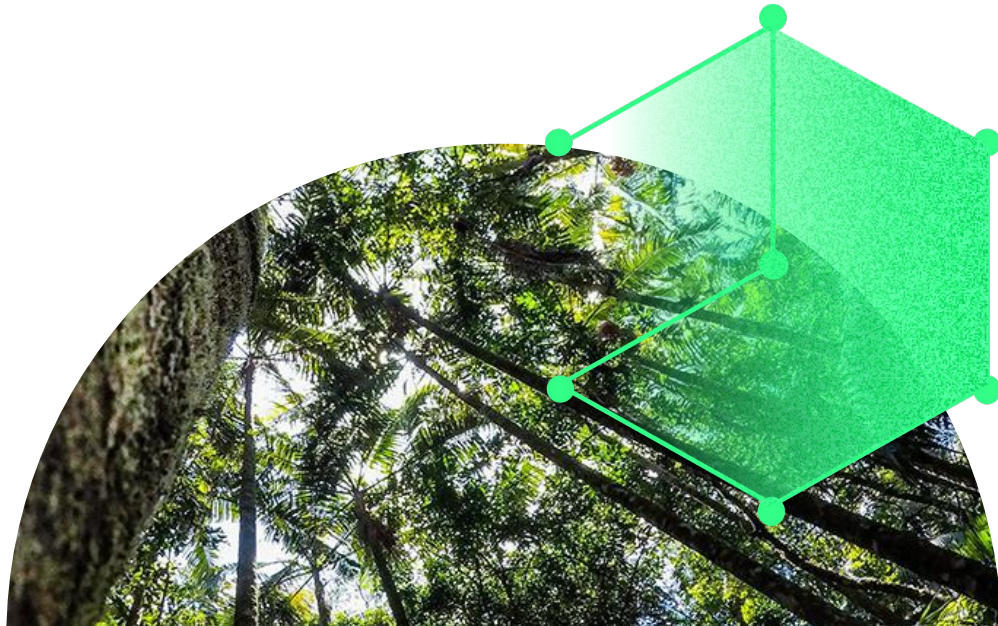
Sponsors: people and businesses wanting have a direct impact in the future of nature

Landowners: people, organisations and communities that ensures that forest remains intact

Validators: third party networks of trusted organisations who can verify the rightful stewardship

		Cutting the forest	Maintaining the forest
Short-term	Incentives	Produce value. E.g. cattle farming	Enable short-term incentives for long-term benefits
Short-term	Costs	Release of stored carbon	Opportunity cost of not cutting the forest
Long-term	Incentives	Less effective agricultural businesses	Enable monetization for biodiversity and atmospheric carbon capture
Long-term	Costs	Increased floods and loss of biodiversity	

IPCC report

Protecting existing forests is more important than planting trees

A forest of mature trees is an irreplaceable community of beings that provides essential services, while a plantation of saplings is not

Conserving remaining ecosystems has more mitigation potential than wind power, and almost as much as solar

Given everything else ecosystems do for us beyond climate mitigation, their conservation should be an absolute global priority

Data taken from www.ippc.ch

There are multiple opportunities for scaling up climate action

a) Feasibility of climate responses and adaptation, and potential of mitigation options in the near-term

options costing 100 USD tCO₂-eq or less could reduce global emissions by at least half of the 2019 level by 2030

Climate responses and adaptation options	Potential feasibility up to 1.5°C	Synergies with mitigation	Mitigation options	Potential contribution to net emission reduction, 2030 GtCO₂-eq/yr

ENERGY SUPPLY
- Energy reliability (e.g. diversification, access, stability) ••• •••
- Resilient power systems ••• •••
- Improve water use efficiency •• ••

Mitigation options: Solar, Wind, Reduce methane from coal, oil and gas, Bioelectricity (includes BECCS), Geothermal and hydropower, Nuclear, Fossil Carbon Capture and Storage (CCS)

LAND, WATER, FOOD
- Efficient livestock systems •• ••
- Improved cropland management •• •••
- Water use efficiency and water resource management •• ••
- Biodiversity management and ecosystem connectivity •• •••
- Agroforestry •• ••
- Sustainable aquaculture and fisheries •• ••
- Forest-based adaptation ••• •••
- Integrated coastal zone management •• ••
- Coastal defence and hardening ••• not assessed

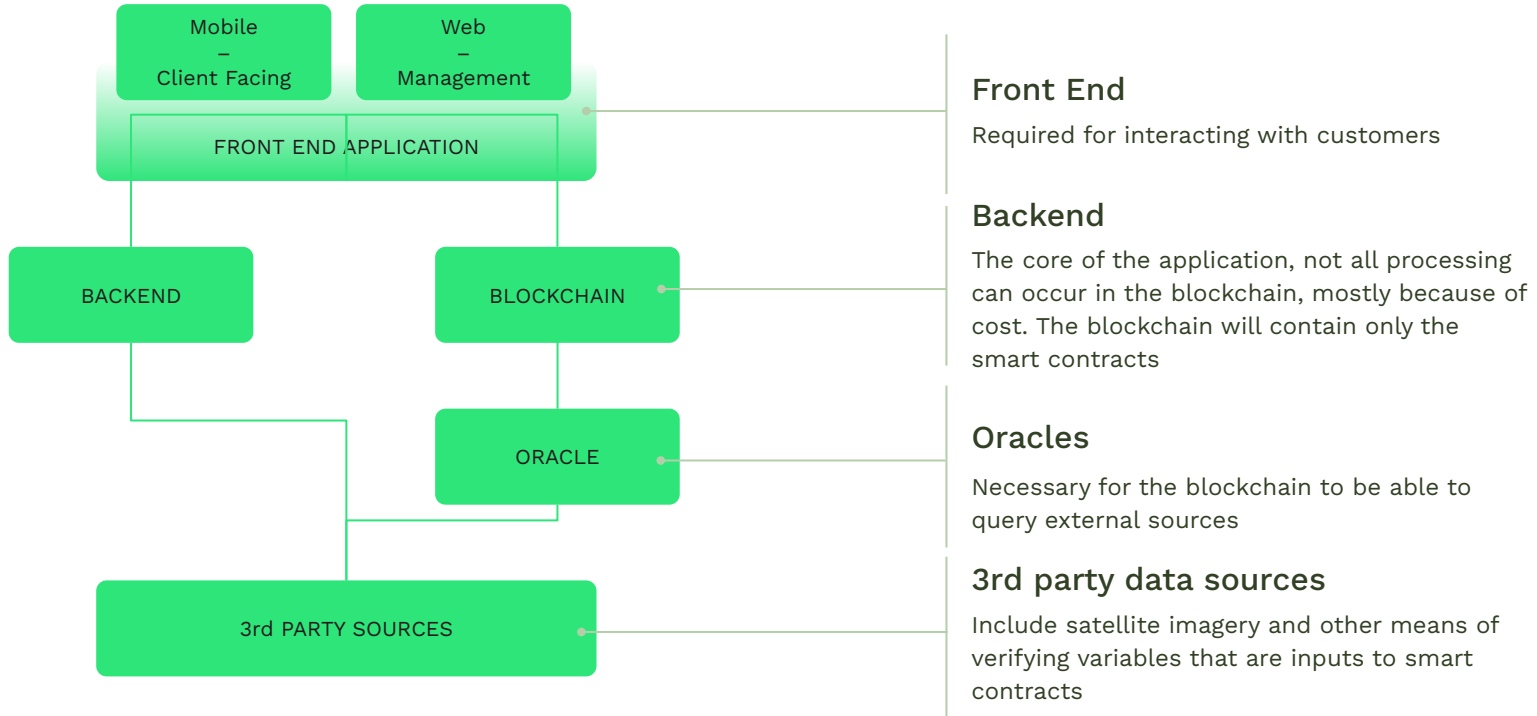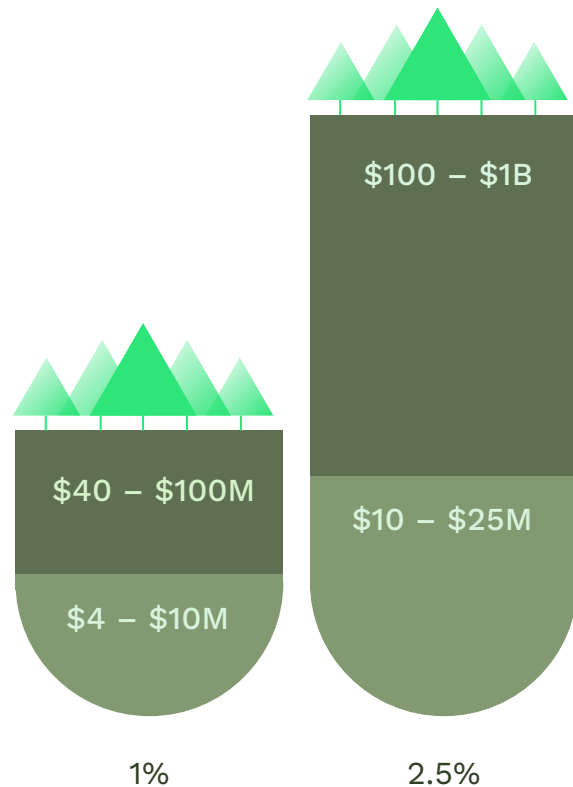Mitigation options: Reduce conversion of natural ecosystems, Carbon sequestration in agriculture, Ecosystem restoration, afforestation, reforestation, Shift to sustainable healthy diets, Improved sustainable forest management, Reduce methane and N₂O in agriculture, Reduce food loss and food waste

SETTLEMENTS AND INFRASTRUCTURE
- Sustainable urban water management •• ••
- Sustainable land use and urban planning •• •
- Green infrastructure and ecosystem services ••• ••

Mitigation options: Efficient buildings, Fuel efficient vehicles, Electric vehicles, Efficient lighting, appliances and equipment, Public transport and bicycling, Biofuels for transport, Efficient shipping and aviation, Avoid demand for energy services, Onsite renewables

HEALTH
- Enhanced health services (e.g. WASH, nutrition and diets) ••• ••

SOCIETY, LIVELIHOOD AND ECONOMY
- Risk spreading and sharing •• ••
- Social safety nets •• ••
- Climate services, including Early Warning Systems ••• ••
- Disaster risk management ••• ••
- Human migration •• •
- Planned relocation and resettlement •• •
- Livelihood diversification •• •••

INDUSTRY AND WASTE

Mitigation options: Fuel switching, Reduce emission of fluorinated gas, Energy efficiency, Material efficiency, Reduce methane from waste/wastewater, Construction materials substitution, Enhanced recycling, Carbon capture with utilisation (CCU) and CCS

Feasibility level and synergies with mitigation
- High
- Medium
- Low
- Insufficient evidence

Confidence level in potential feasibility and in synergies with mitigation
- ••• High
- •• Medium
- • Low

Net lifetime cost of options:
- Costs are lower than the reference
- 0–20 (USD per tCO₂-eq)
- 20–50 (USD per tCO₂-eq)
- 50–100 (USD per tCO₂-eq)
- 100–200 (USD per tCO₂-eq)
- Cost not allocated due to high variability or lack of data

High level architecture

Mobile
—
Client Facing

Web
—
Management

FRONT END APPLICATION

BACKEND

BLOCKCHAIN

ORACLE

3rd PARTY SOURCES

Front End

Required for interacting with customers

Backend

The core of the application, not all processing can occur in the blockchain, mostly because of cost. The blockchain will contain only the smart contracts

Oracles

Necessary for the blockchain to be able to query external sources

3rd party data sources

Include satellite imagery and other means of verifying variables that are inputs to smart contracts
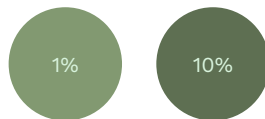
Business Model

Revenue per year based on % of transaction fees taken from caretakers' income

% Forest protected

$40 – $100M

$4 – $10M

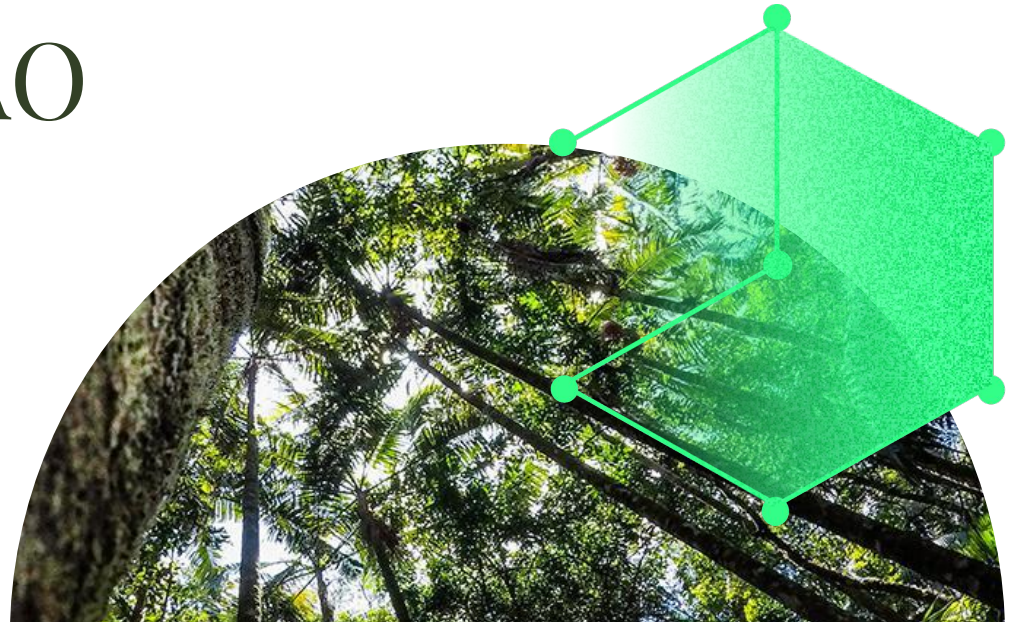$100 – $1B

$10 – $25M

1%

2.5%

Economics & Total addressable market

Potential economic value per year, of the two major rainforests combined

870M hectare

Amazon + Congo Basin
rainforests

$40B - $100B

Join NatureDAO

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🐦 TheNatureDAO 📷 TheNatureDAO