



Transforming Carbon Markets Through Community-Driven Innovation

SAFE funding round

SAFE Round investment presentation

Mission Statement

Malama Labs pioneers Hawaii's carbon removal future through innovative biochar production and digital carbon market solutions. We transform local biomass into high-carbon biochar (80%+ carbon content) while building a transparent, community-driven carbon credit marketplace.

Vision Statement

To establish Hawaii as a model for scalable, technology-enabled carbon removal by connecting local communities with global climate impact through verifiable biochar production and digital carbon markets.

Key Differentiators

- Hawaii-based biochar production using local feedstocks
- Integrated carbon credit tokenization platform
- Community-centric approach to carbon markets
- Modular, standards-compliant technology stack
- Focus on agricultural and urban applications

Investment Opportunity Highlights

- Seeking up to \$4M via SAFE note to finance go to market, technology development, carbon credit creation and biochar production in Maui Hawaii
- Initial facility co-located with Maui's largest macadamia nut farms
- Three revenue streams: biochar sales carbon credit sales and digital MRV licensing and transaction revenue
- Blockchain-enabled MRV platform for transparent carbon accounting
- Proven pyrolysis technology with immediate market application
- First-mover advantage in Hawaii's agricultural carbon market

Financial Highlights

IRR: 73.86%

140%

CAGR
based on 3y projections

Project Impact

250k
tons biochar produced
annually - y5

213k
tons co2 sink
annually - y5

15%
Hawaii's 2025 carbon
credit requirement

malama labs incorporated

Entity Type	Delaware C-Corp
Year of Formation	2024
Raise Type	SAFE Round / Valuation Cap
Minimum Raise	\$750,000.00
Maximum Raise	\$4,000,000.00
Minimum Investment Amount	\$250,000
Industry	Carbon Removal / Markets / Clean Tech
Projected Rev Year 1	\$3.258m
Projected Rev Year 3	\$18.84m

total addressable market

biochar, Carbon Credits and MRV Licensing represent a multi-billion dollar opportunity with Malama Labs positioned to capture significant share across all three sectors.

IRR	3-Year IRR 73.86%
	5-Year IRR 247.0%
	10-Year IRR 251.8%

investment opportunity overview

Malama Labs represents a unique opportunity to participate in the rapidly growing carbon removal market while addressing critical environmental challenges. Our integrated approach combines proven technologies with innovative digital solutions, creating a scalable model for global expansion.

use of funds

1. Infrastructure Development (40%)
- Biochar reactor deployment
 - Supply chain optimization
 - Production scaling
2. Technology Enhancement (35%)
- MRV platform development
 - Blockchain infrastructure
 - Marketplace features
3. Market Expansion (25%)
- Community partnerships
 - Regulatory compliance
 - Team expansion

Global Carbon Crisis

- Global carbon emissions continue to rise, threatening our climate stability
- Current carbon accounting systems are manual, inefficient, and often inaccurate
- Businesses struggle to effectively track and offset their carbon footprint
- Agricultural waste management remains a significant environmental challenge
- Hawaii faces unique sustainability challenges as an isolated island ecosystem

Market Gaps

- Only 5% of carbon credits have real-time verification
- 73% of credits lack standardized measurement protocols
- Average verification time: 12-18 months
- Landowner participation rate under 8% globally

10b

#of tonnes of co2
that need to be
removed annually by
2050

62%

62% of buyers
report lack of
trust in current
system

critical challenges

carbon markets are in distress

verification

double counting inflated baselines, and questionable additionally claims undermine the market

complexity

fragmented markets, varying standards, and opaque pricing create entry barriers

uncertainty

inconsistent global policies and changing requirements create market hesitancy



Mālama Labs is building a scalable, robust, and verifiable durable carbon credit platform

- Streamlines offset verification
- Develops practical carbon capture projects
- Integrates with existing business operations
- Advanced biochar production and application methods
- Comprehensive carbon drawdown measurement
- Blockchain-based verification system
- Local community engagement and economic benefits

Key Benefits



Trusted carbon removal

Biochar is one of the safest, most durable & fastest ways to draw down carbon



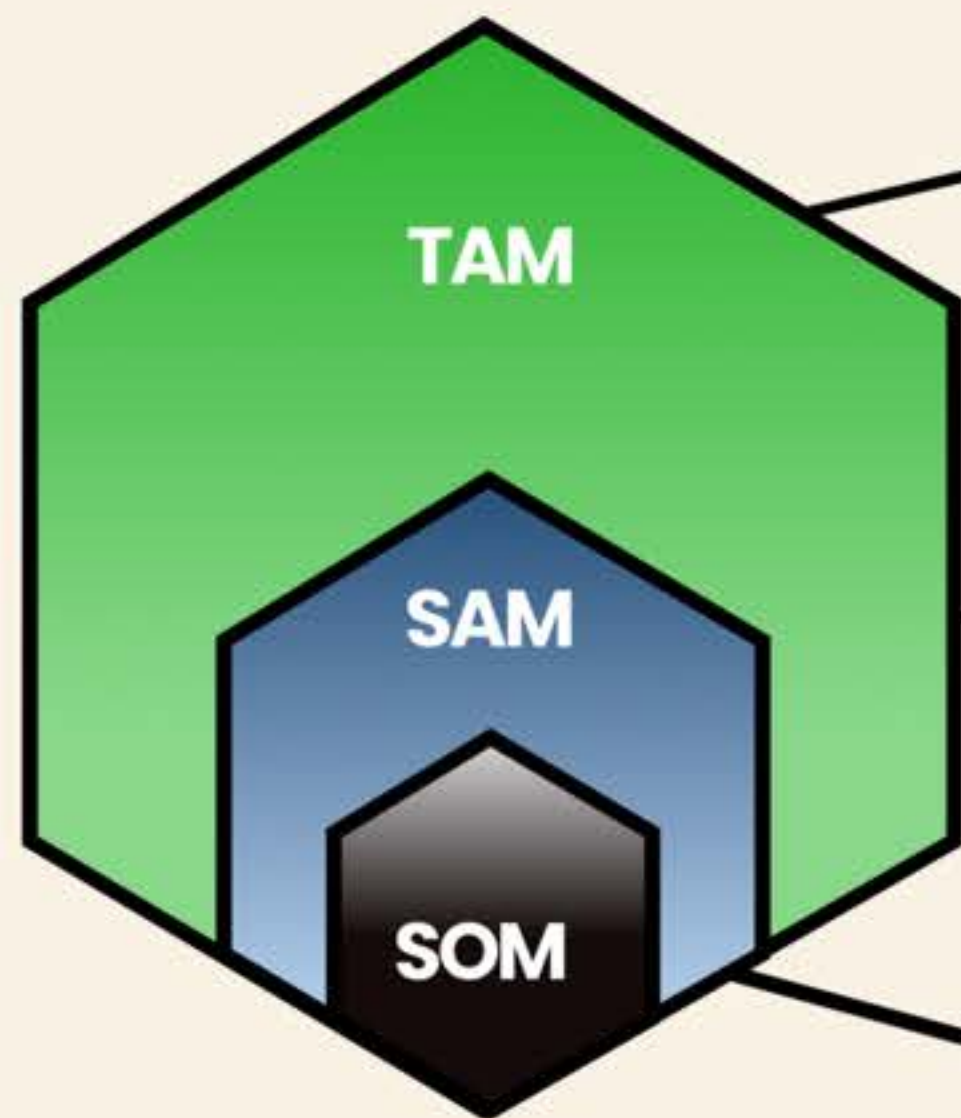
Permanence of 100+ years

Biochar provides guaranteed carbon sequestration for 100+ years with virtually no risk of reversal



Positive impact beyond carbon

12 out of the 17 UN Sustainable Development Goals



\$167 t

- Cost to remove carbon required to prevent additional warming

\$272 b

- Global carbon market value 2029
- 20% growth y/y


\$1 b

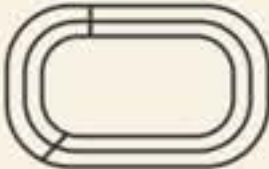
- annual voluntary market volume
- 50% growth y/y

100x
demand growth
by 2050

\$250

ton c02e
target price
biochar permanent storage
with co-benefits and local
retirement

biochar		
Global biochar market reached \$1.5B in 2023		
<ul style="list-style-type: none">• Projected CAGR of 15.2% (2024–2030)• Expected market size of \$4.3B by 2030• US agricultural biochar demand growing at 17.3% annually• Hawaii's potential for 500,000 tonnes annual biochar production		
Buyers		Sellers
Agriculture / Farmers / Government / Lanowners		Producers / Reactors

Tokenization + MRV Technology		
Digital MRV market size: \$1.2B (2023)		
<ul style="list-style-type: none">• Expected growth to \$5.8B by 2028• 45% adoption rate among carbon projects• 85% cost reduction potential vs. traditional verification• Integration with IoT growing at 34% CAGR		
Buyers		Sellers
New Project Developers Empowered by simplified, cost-efficient, and fast-tracked project initiation.		Project Developers Offering verified data for streamlined operations and compliance.
Market Participants Accessing accurate data to reduce complexities and enhance decision-making efficiency.		Project Finance Providers Delivering transparent metrics to de-risk investments.
		Traders Ensuring reliable, verified credits for market transactions.

carbon credits		
Voluntary carbon market value: \$2.1B (2023)		
<ul style="list-style-type: none">• Projected growth to \$75B by 2030 (Morgan Stanley)• Ave biochar price \$131/metric ton• Premium regional, durable biochar credits are trading at over \$400• 92% of Fortune 500 companies have net-zero commitments• Nature-based solutions command 66% premium over other credits		
Buyers private companies, NGOs, governments, universities, and individuals		Sellers Project Developers, Marketplaces, Brokers and Agents

Unique Market Position

Malama Labs stands alone in delivering the first comprehensive regional carbon marketplace solution.

Our platform uniquely combines:

- ✓ Only player offering complete regional carbon market infrastructure
- ✓ Industry-leading producer returns (80%+ vs. industry 20-40%)
- ✓ Fastest speed to credit issuance (days vs. months)
- ✓ Full technology integration (biochar production → credit trading)

Capability/Feature	Malama Labs	NCX	Nori	Carbonfuture	Charm	Pacific Biochar	CAR	Puro.earth
Regional Focus	✓	✗	✗	✗	✗	✓	✗	✗
Multi-Technology	✓	✗	✓	✗	✓	✗	✓	✓
Automated MRV	✓	✓	✓	✓	✗	✗	✗	✓
Blockchain Integration	✓	✓	✓	✓	✗	✗	✗	✓
Community Governance	✓	✗	✗	✗	✗	✓	✗	✗
Local Market Creation	✓	✗	✗	✗	✗	✗	✗	✗
Production Integration	✓	✗	✗	✗	✓	✓	✗	✗
Speed to Credit	✓	✗	✓	✓	✗	✗	✗	✗
Producer Returns	✓	✗	✓	✓	✗	✓	✗	✓
Real-time Price Discovery	✓	✗	✓	✓	✗	✗	✗	✓
✓ = Yes/Available ✗ = No/Limited								

OUR USP

- **First Mover:** Only end-to-end solution built for Hawaii's 2040 carbon neutrality mandate
- **Technology:** Integrated MRV, blockchain, and AI automation
- **Community:** Deep local relationships and built-in governance
- **Scalability:** Proven blueprint for regional market expansion

biochar



Production capacity: 50,000 tonnes/year by y3

Carbon content: >85%

Surface area: >300 m²/g weight

Water holding capacity: 6x

Pricing
\$90 - \$220 per cubic yard



carbon credits

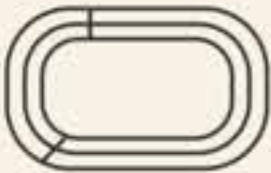


- **Credit price:** \$250-350/tonne
- **Verification time:** Instant
- **Additionally rating:** 95%
- **Permanence guarantee:** 1000+ years
- **Real-time monitoring:** 15-min intervals



Blockchain verified chain of custody

Malam Token / Hawaii Durable Carbon Market / dMRV



Digital Platform

- Processing capacity: 1M transactions/day
- API integrations
- Mobile app
- Verification accuracy: >99.9%
- Average transaction time: <3 seconds
- Customer onboarding time: <24 hours

The Science

Biochar harnesses nature's carbon cycle through innovative technology:

- **Natural Process:**
 - Biomass captures CO₂ through photosynthesis
- **Technical Innovation:**
 - Pyrolysis transforms biomass into stable biochar
- **Durable Storage:**
 - Creates long-term carbon storage in a stable form

Market Leadership

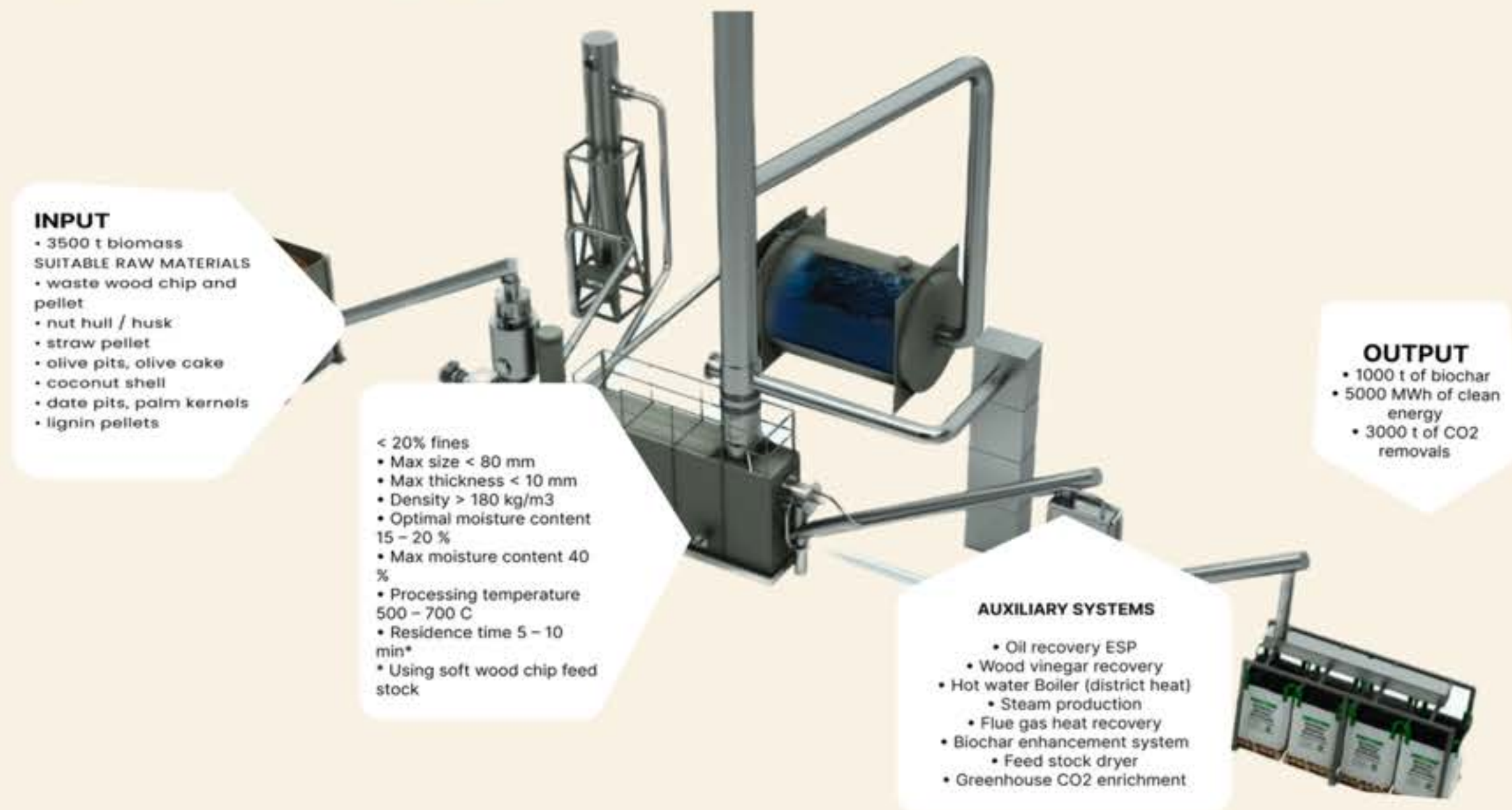
BCR dominates the 87% of CDR Market:

- Delivered 52,000 tonnes of verified removal in 2022
- industry average of \$388/tonne
- Verified Quality

Scaling Potential

BCR offers immediate and significant impact:

- Annual Potential: 0.44–2.62 Gt CO₂ removal capacity
- Portfolio Impact: Up to 35% of total CDR needs
- Ready Now: Immediately deployable at scale
- Verified Impact: Third-party certified and traceable



Re-imagine Environmental Value

- Transform physical assets (like biochar) into digital tokens.
- Enable real-time verification and trading.
- Democratize access to carbon markets.
- Create transparent, efficient marketplaces.

Case Study: Maui Biochar Lab

- Physical Asset: 2,000 tons/year biochar, 6,000 tons CO₂e sequestered.
- Digital Twin: Real-time monitored carbon credits, community-owned.

Technical Innovation

- IoT: Continuous monitoring & verification.
- Digital: Smart contracts for automated compliance.
- Market: Dynamic pricing and automated trading.

Market Transformation

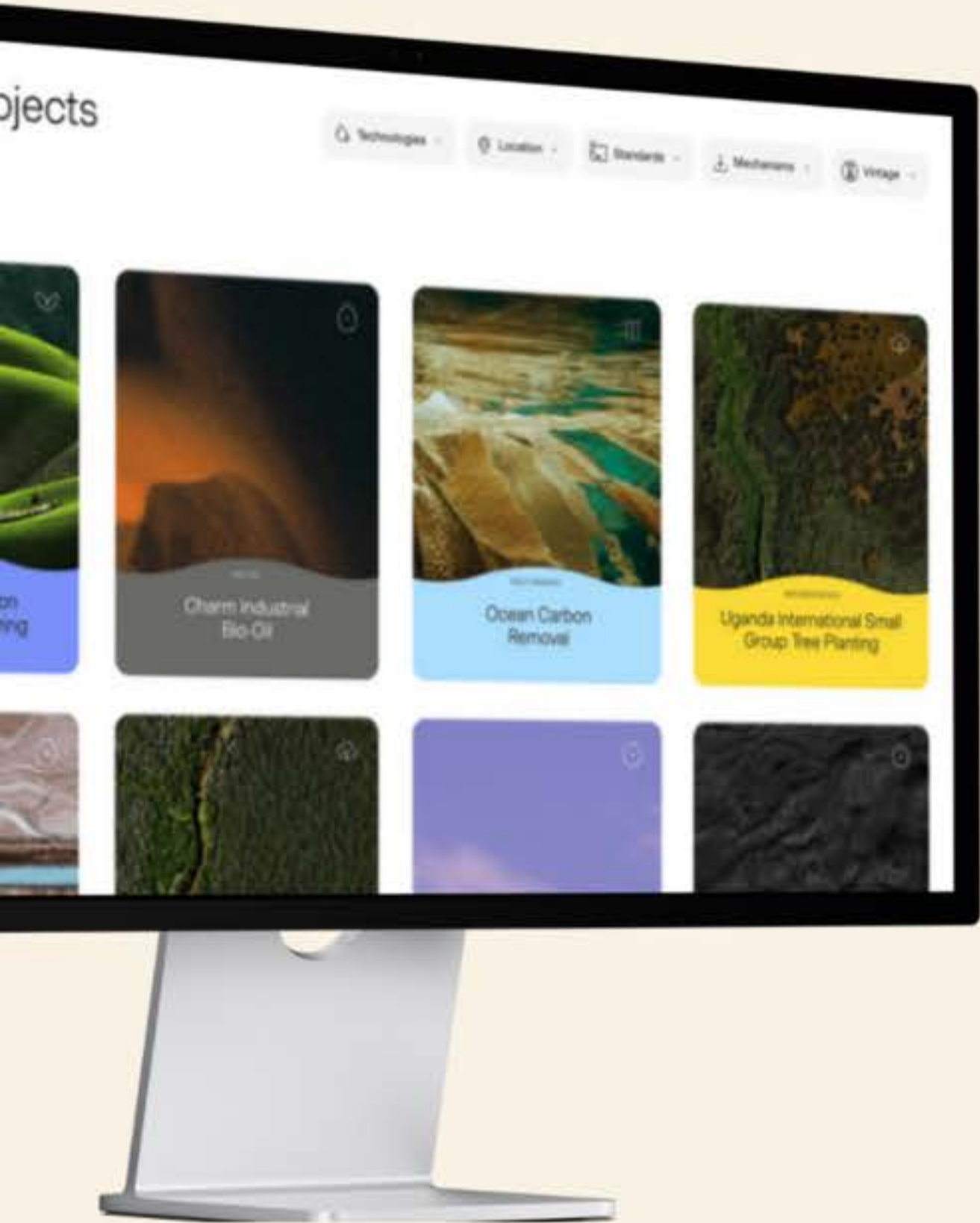
from Traditional to Tokenized

- **Before:**
 - Manual verification taking months
 - Fragmented record-keeping
 - High transaction costs
 - Limited market access
 - Questionable permanence
 - Delayed settlements
- **After:**
 - Real-time verification
 - Immutable tracking
 - Minimal transaction costs
 - Global accessibility
 - Guaranteed permanence
 - Instant settlement

Real-World Asset Tokenization

- **New Opportunities:**
Tokenized carbon credits + co-benefits
- **Global Market Access:**
Seamless cross-border trading.
- **Liquidity & Inclusivity:**
Broader participant access.





Hawaii's First Regional Carbon Marketplace

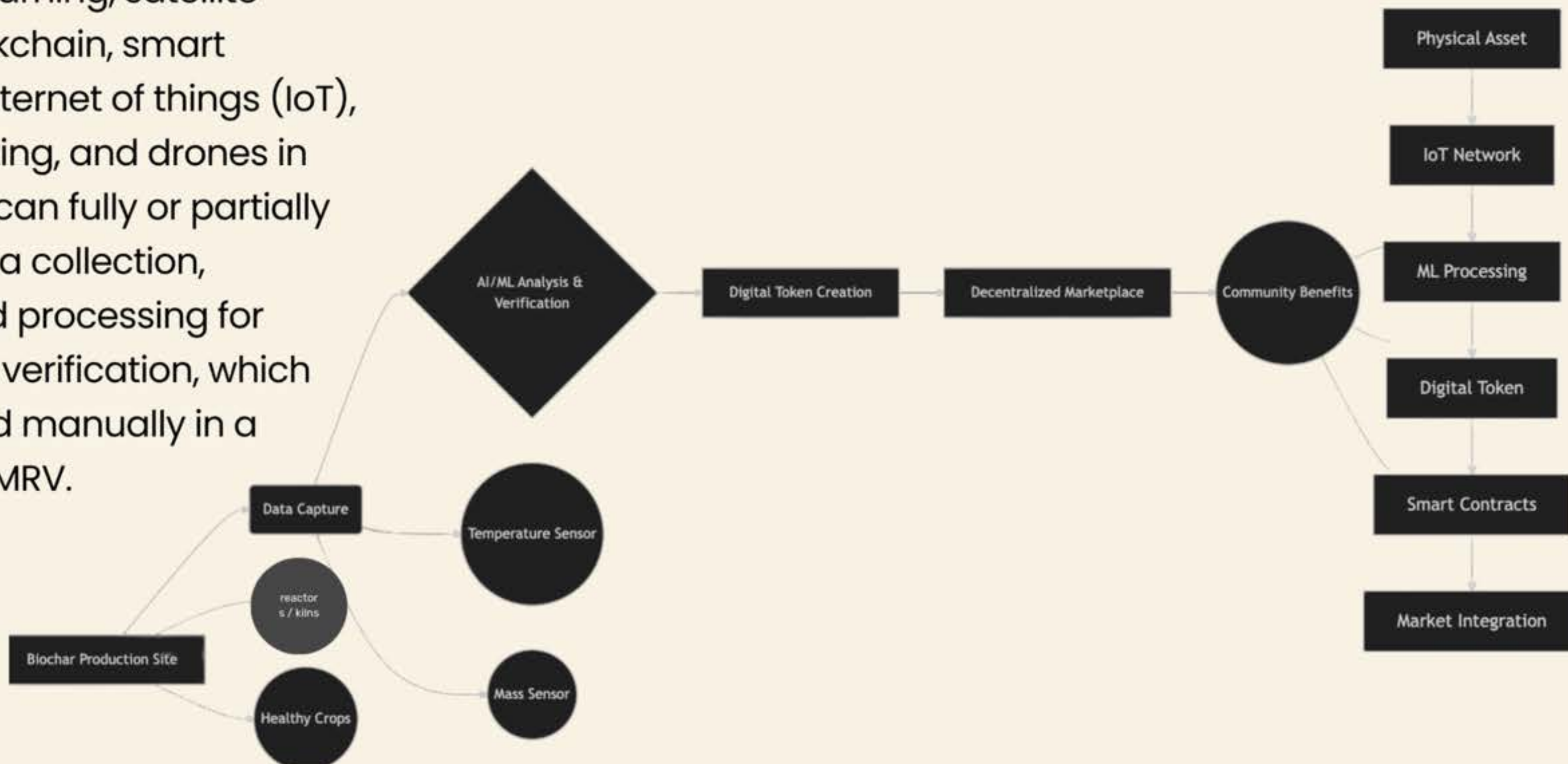
A purpose-built registry connecting local carbon removal projects with global markets while maintaining Hawaii's unique environmental and cultural values.

Key features:

- Streamlined verification for Hawaii-specific projects
- Integration with international carbon standards
- Focus on durable carbon removal methods
- Support for indigenous and community-led initiatives

	Registry Functionality
Transparent credit tracking through DLT	
Verification via MRV protocols	
State emission reporting	
	Trading Platform
Automated Credit Matching	
Local Credit and Retirement Automation	
Standards Body Integration	
	Credit Reqs
Focus on Supporting Hawaii's Mandate	
2025 - 8m credits	
2030 - 14M credits	

AI, machine learning, satellite imagery, blockchain, smart sensors, the internet of things (IoT), cloud computing, and drones in MRV systems can fully or partially automate data collection, recording, and processing for reporting and verification, which are conducted manually in a conventional MRV.



Blueprint for Scalable Environmental Innovation

Our combined holdings between our two initial biomass suppliers represent landscape-scale opportunity for innovation.

With 1,255.35 acres supporting 75,321 macadamia trees – we're building a model for regenerative agriculture that could reshape Hawaii's agricultural future.

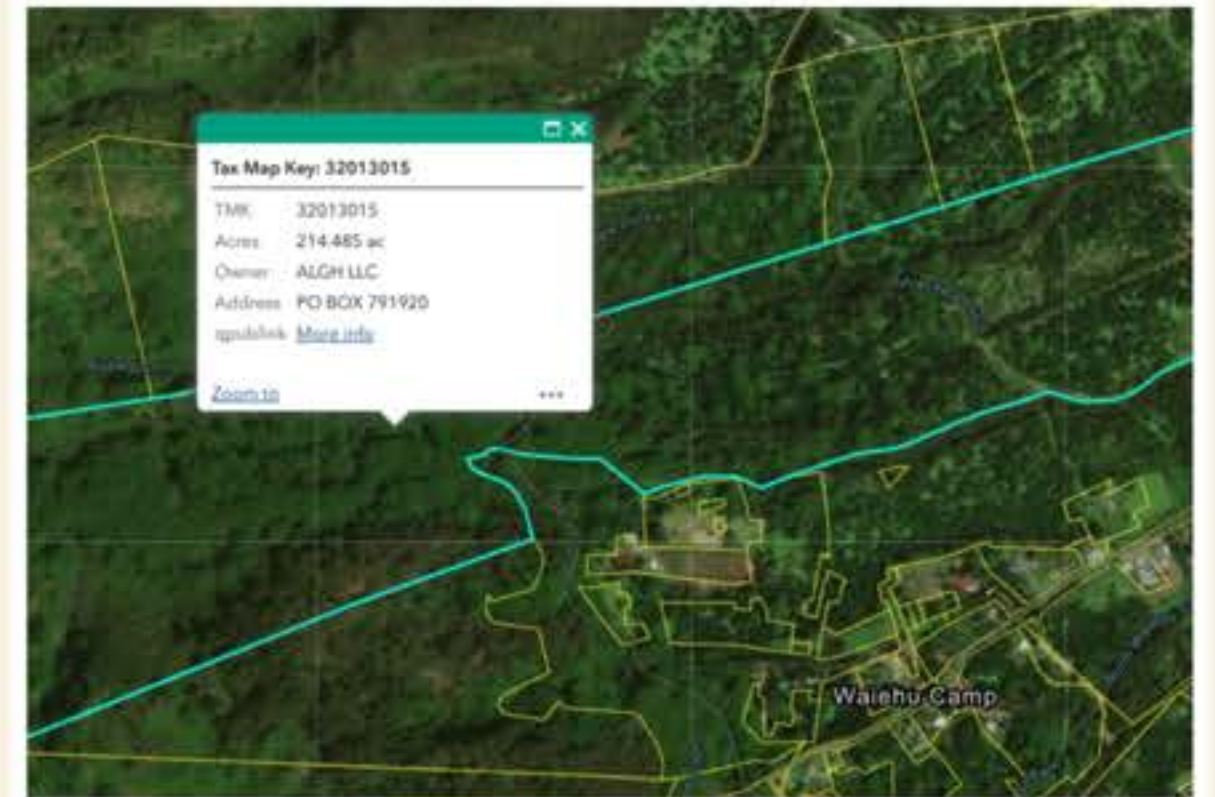
The Biomass Opportunity

Our operation generates 4,595 tons of biomass annually.

- 2,260 tons of husk waste: traditionally seen as a disposal challenge, now a cornerstone resource
- 829 tons of shell waste: dense, carbon-rich material perfect for pyrolysis
- 1,506 tons of pruning waste: annual renewable biomass stream

Through advanced pyrolysis technology, we can transform this "waste" into 1,378 tons of biochar annually.

This process doesn't just eliminate waste – it actively sequesters 1,172 tons of CO2 equivalent, positioning our project as a vital contributor to Hawaii's climate goals.



Malama Labs bridges Hawaii's unique environmental challenges with global carbon markets through our innovative marketplace.

By focusing on local projects like biochar production from macadamia waste and invasive species removal, we create measurable impact within our islands while meeting rigorous international standards.

Our blockchain-based platform and created from best practices across 12 global standards including Puro certification - ensure transparency and credibility, making Hawaiian carbon credits accessible to worldwide buyers seeking high-quality, verified carbon removal solutions.

- **Digital MRV System:** Automating credit verification and registration
- **Cardano Blockchain Integration:**
 - Immutable transaction ledger
 - Smart contract automation
 - Cross-border market enablement
- **AI-Powered Optimization:**
 - Production efficiency enhancement
 - Market dynamics optimization
 - Predictive analytics for scaling

EXAMPLE

Expected Returns (5-Year Exit):
(\$2.5M SAFE ROUND)

Initial ownership: 17.2%

Conservative Case (\$200M valuation):

- Return: \$17.2M
- Multiple: 7.2x
- IRR: 48%

Base Case (\$350M valuation):

- Return: \$45M
- Multiple: 18x
- IRR: 78%

Optimistic Case (\$500M valuation):

- Return: \$90M
- Multiple: 36x
- IRR: 105%

SCENARIO ANALYSIS ASSUMPTIONS FOR ROI CALCULATION	<p>\$200M Valuation (Conservative)</p> <ul style="list-style-type: none">• Revenue: \$20M (Y5) from carbon credit sales and biochar• 10x revenue multiple, standard for carbon/climate marketplaces• Key metrics: 14M credits needed by 2030 in Hawaii• Comparable: NCX at \$180M (2023)
	<p>\$350M Valuation (Base Case)</p> <ul style="list-style-type: none">• Revenue: \$35M (Y5) with expanded market reach• 10x multiple justified by:• First mover in Hawaii carbon registry• Blockchain tech premium• Puro certification advantage• Regional expansion potential• Comparable: Pachama \$370M (2023)
	<p>\$500M Valuation (Optimistic)</p> <ul style="list-style-type: none">• Revenue: \$50M (Y5) with full market penetration• 10x multiple supported by:• Hawaii carbon neutrality mandate• Projected credit demand growth (21.5M by 2040)• Tech platform licensing opportunities• Global market access• Comparable: Sylvera \$500M (2024)

Traction & Milestones

our bootstrapped progress and next steps

mālama labs

our progress to date

- Secured initial pyrolysis unit for biochar production
- Developed comprehensive Digital MRV system
- Advanced development of Hawaii Carbon Market platform
- Established key regional partnerships
- Initiated discussions with potential expansion regions

next

- puro LCA finalization
- puro approval for credit pre-sale
- open North Maui Lab
- create batched tokens and biochar for testing and measurement with validation of methods
- perform biomass feedstock review and analysis – albyssian vs. macademia nut
- finalization of stakeholder engagement
- sell first carbon credits from Hawaii Durable Carbon Marketplace

ecosystem partners

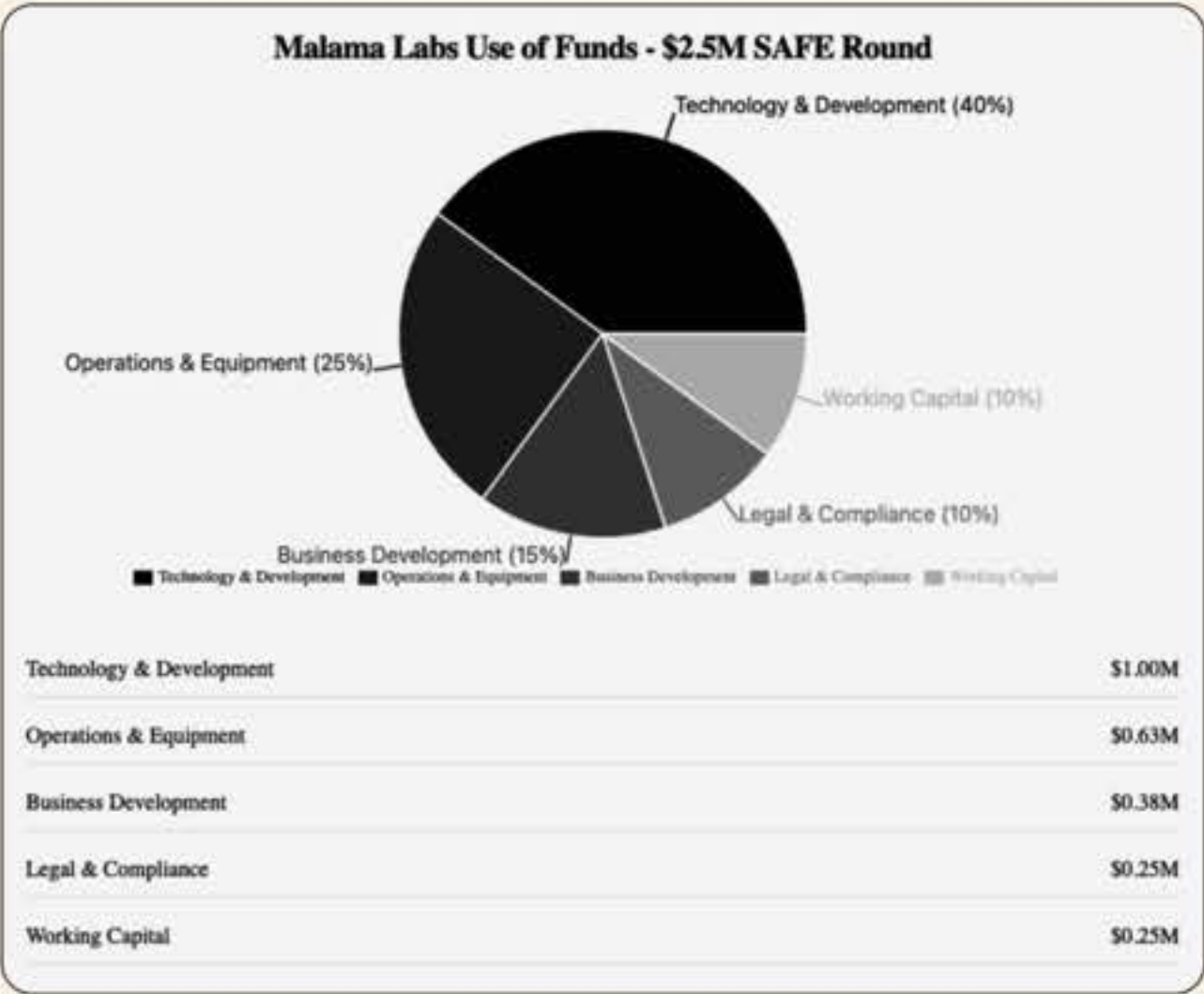
**puro •
earth**



SAFE Round Terms

Malama Labs is raising an initial \$1.2 up to \$4m in Funding via a \$20m post-money valuation cap SAFE Note.

use of funds



anticipated returns

anticipated impact

250k tons biochar produced annually - y5

213k tons co2 sink annually - y5

co-benefits



THANK YOU FOR YOUR INTEREST IN OUR PROJECT FOR FULL ROUND DOCUMENT ACCESS PLEASE REACH OUT TO JEFFREY@MALAMAPROJECT.ORG

mahalo and aloha