



# CASSAN EARTH

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UNLOCKING BLUE CARBON USING AI

NATIONAL AI CHALLENGE

2025



# An Ocean of Opportunity for Nature Based Solutions

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Net **Zero** Targets + Blue Carbon restoration could generate hundreds of **millions of tonnes** of **CO<sub>2</sub>** credits + Blue carbon credits trade at a **40% premium** over forestry = A multi-billion market is waiting to be **unlocked**





# Monitoring, Reporting and Verification (MRV) is Broken

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**\$3k–\$14k** per hectare in MRV costs + **12–18 months** delay in verification before credits can be sold + Lack of transparency and **trust** for buyers





# Value Proposition

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**We Help**

**Who are faced with**

**By Addressing**

**They gain**

**Pain removed**

**Project Developers**

**Being locked out of the carbon market because traditional MRV is too expensive, slow, and complex**

**High MRV costs and inconsistent data for blue carbon baselines**

**Affordable, fast, and audit-ready baseline reports powered by AI and satellite data — unlocking premium blue carbon credits**

**The barrier to accessing carbon finance — enabling projects to finally reach global buyers**



## Net Zero & Compliance

Almost  $\frac{2}{3}$  of worlds biggest companies and over **140 countries** have net zero targets

## Corporate Demand

Companies like Meta, Goggle, Microsoft are pledging to purchase up to **20 million tons** of high quality **nature based carbon** removal credits by **2030**

## Premium Credits

Blue Carbon credits selling at premium price of **40%** due to its co-benefits of **climate, biodiversity** and **community**

## Voluntary Carbon Market

\$4 Billion today  
→ **\$24 Billion** by 2030, nearly **35%** annual growth

## Why now?

## Technology

**AI and Satellites** making MRV possible at scale



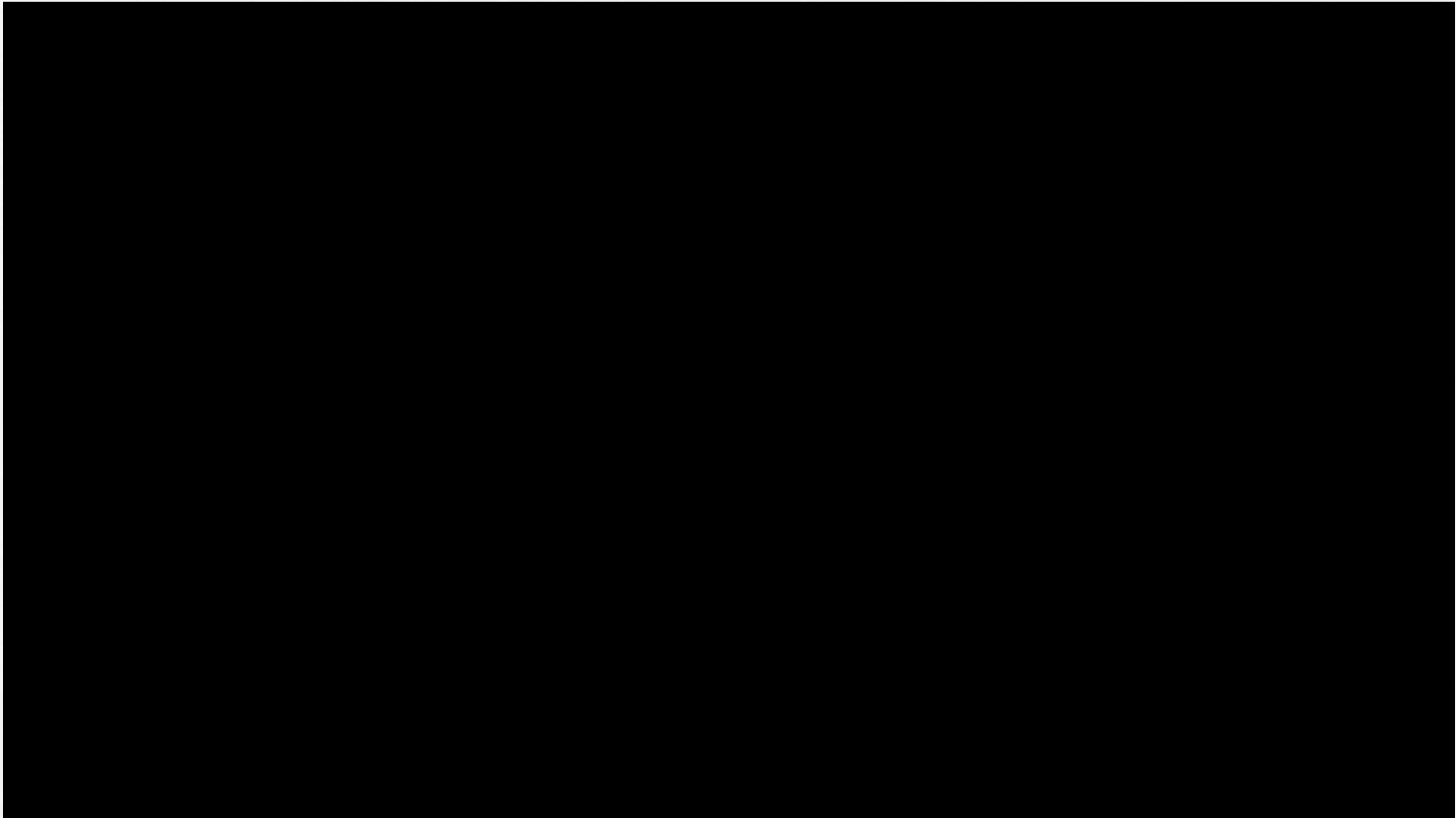


# DEMO

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Marine

CassanEarth

blue ventures  
beyond conservation

the  
BLUE  
CARBON  
initiative

 ERM

kanop


 KUMI  
ANALYTICS

PLANETARY

Manual

Tech & AI

 ARCADIS

 Pachama

 VERSANT

 Perennial

Terrestrial



# Business Model

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## Subscription Fees:

Clients pay monthly or annual fee to access MRV platform, which includes advanced monitoring, reporting and data visualisation features.

We offer different pricing tiers depending in the scale and complexity of project.

## Percentage of carbon credits received:

Clients will pay percentage of the carbon credits they receive as result of using our platform.

## API & Data Access:

API subscriptions.

Datasets curated packages (historical trends, baselines, impact metrics) for users that need deep analysis.





# Meet Our Team

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**Emer Shovlin**

Master's in Marine Conservation Science and postgraduate degree in Data Science. She is an Early Career Ocean Professional (ECOP) contributing to ocean policy dialogues in Europe.

With prior management and business experience, Emer brings a cross-disciplinary perspective and sees the potential of combining AI technology with ocean science to transform how we monitor and protect marine ecosystems and that is why she founded Cassan Earth.

She is also a TEDx speaker, advocating for ocean literacy and inspiring collective action to safeguard our shared seas.





# Meet Our Team

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**Jose Dominguez**

With 20+ years of experience building software systems across start-ups, corporates, and universities, Jose is a seasoned full-stack developer, architect, and manager.

His career spans roles at MIT (CSAIL, Media Lab), Trinity College Dublin, NUIM, Red Hat, FeedHenry, Thunkable, and now the App Inventor Foundation.

At Thunkable, he scaled and led a fully remote, distributed team of 20+ engineers across the Americas and Europe at a YC-backed start-up that raised over \$35M.





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**Aidan Wallace**

Data Scientist specialising in Earth Observation and AI, with a focus on sustainability and environmental monitoring.

He has led national-scale AI platform development, designing and deploying deep learning models for satellite imagery analysis.

He holds an MSc in Artificial Intelligence from the University of Galway, where his research explored self-supervised learning and Vision Transformers for spatio-temporal satellite data.

Passionate about applying AI to climate resilience and ecosystem monitoring, Aidan brings end-to-end expertise across the machine learning lifecycle to help build the next generation of blue carbon monitoring platforms.





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**Amber Cher**

MSc Sustainable Development candidate at UCD with 5+ years' experience in sustainability, entrepreneurship, and venture strategy, and is a Terra.do Climate Fellow.

She co-founded ventures in sustainable mobility and health access, reaching the finals of the Irish National Hult Prize 2025 and the Una Europa Student Incubator 2025.

Amber drives scalable climate innovation, leveraging her expertise in sustainability and business strategy to advance AI-powered blue carbon solutions.





# THANK YOU

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