



# BRINGING NATURE-BASED SOLUTIONS INTO THE FINANCIAL MARKETS



# Executive Summary

Humanity and other life on the planet are approaching a catastrophic tipping point, creating an urgent need for innovative and scalable approaches. In parallel the interconnected world rises complexity and uncertainty increasing the need to bring together diversified domain expertise and collective action.

To address those global challenges, among others, it is urgent to implement policy coherent solutions with both private and public participation. Our mission is to design and implement an evidence-based framework to allow this participation and accelerate those policies.

**AxessImpact** is a company created in 2021 aiming to bring trust and transparency to investors and corporates willing to invest in Nature-based Solutions, SDGs and Carbon certificates.

**AxessImpact** offers a platform of innovative solutions based on our 3Ms process: Measurement, Monitoring and Monetizing. A multi-stakeholder integrated framework builds on an eco-blockchain able to create multi-protocols with high scalability and resilience thanks to disintermediation and governance.



# Agenda

## Part I

## IN THEORY

What

Why

How

## Part II

## IN PRACTICE

Carbon Market

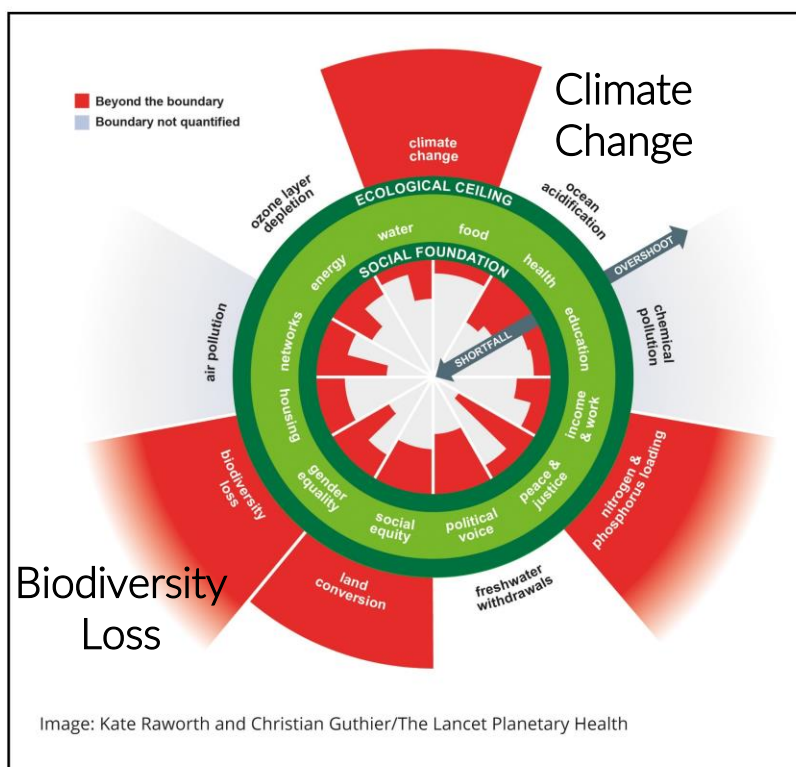


What

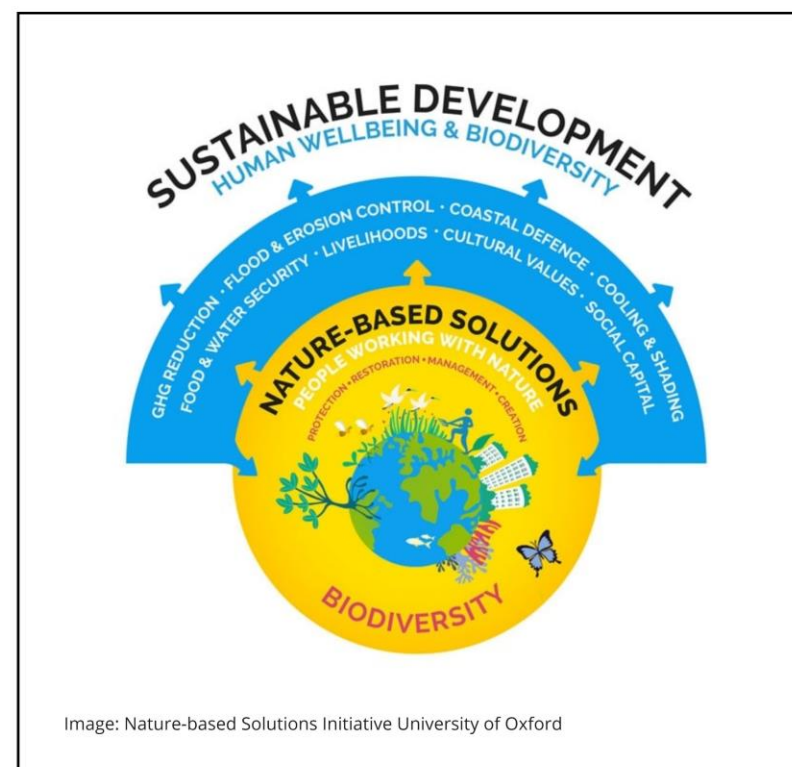
# Wicked Problems

## Climate Change & Biodiversity Loss

### THE WICKED PROBLEMS



### NATURE-BASED SOLUTIONS





What

# Wicked Problems

## Climate Change & Biodiversity Loss

### FROM VICIOUS CYCLE...TO

Climate Change is exacerbating Biodiversity Loss with enormous risk for human prosperity. Tragedy of Commons and Horizon increase the risk of inaction and shorttermism

Biodiversity Loss



Social unrest

### VIRTUOUS CYCLE

CO2 Sequestration





## What

# Wicked Problems

## Climate Change & Biodiversity Loss

Estimates of how much money it would take to end global climate change range between \$300 billion and \$50 trillion over the next two decades and few trillion annually for the Biodiversity loss – with a need to bring solutions to bridge those financing gaps

Such a massive range is due to disagreement among experts, climate change and biodiversity loss are a wicked problem. Multidimensional challenges that are difficult to resolve due to incomplete or contradictory information, differing views on the nature of the problem, or complex interactions with other issues.

They involves many actors and experts, nearly all of whom have different ideas of the problem and its ideal solutions whilst the future costs and benefits are uncertain and unevenly distributed. Those wicked problems are exacerbated by the “Twin Tragedies”:

- **Tragedy of Commons**
- **Tragedy of Horizon**



Why

# Wicked Problems

## The need for collective action



Denial

Resignation

Determinism

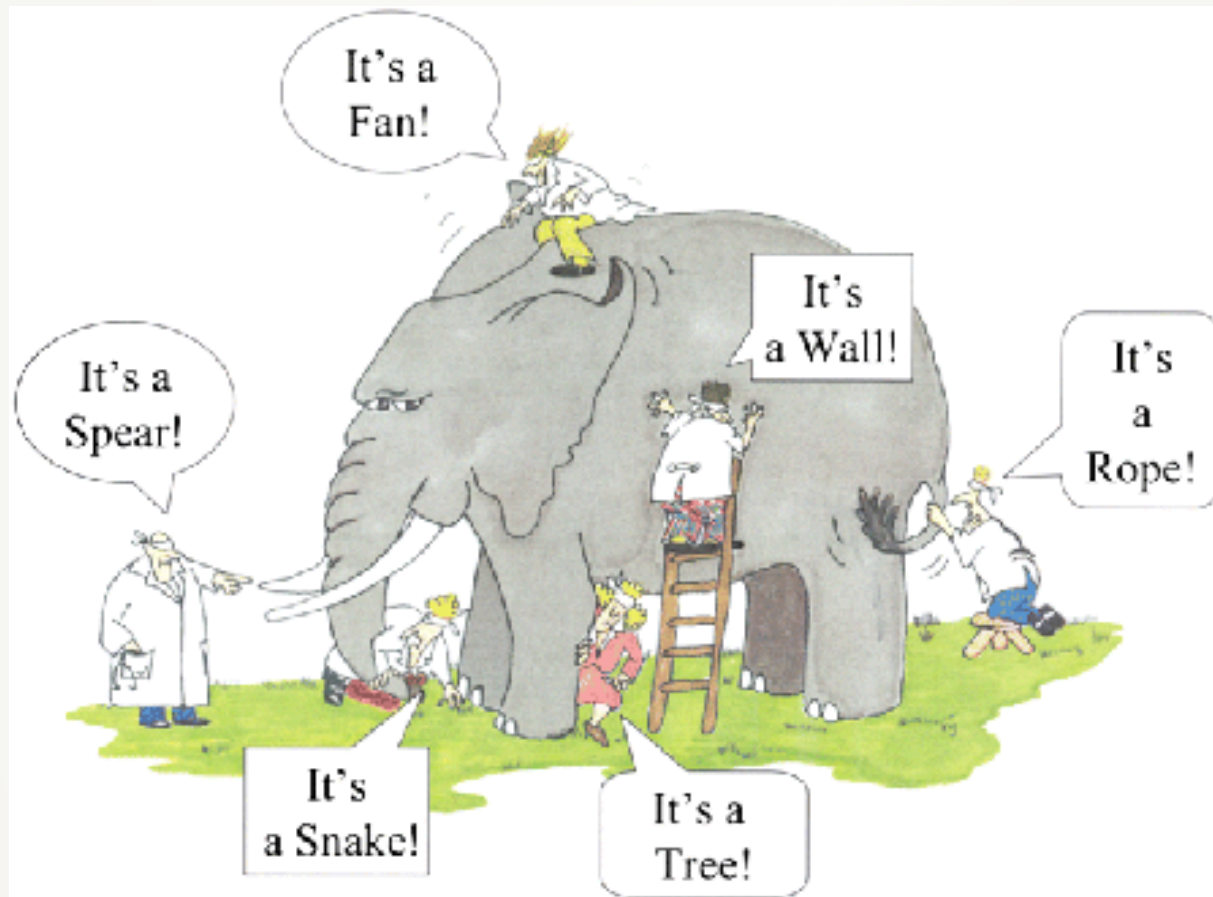
Polarisation



Why

# Wicked Problems

## The need for collective action



Systemic  
need to see the whole picture

- Private-Public Partnership
- Multi Stakeholders
- Pooled of Knowledge and Expertise
- Cooperation – Space / Time / Multiple
- Transparent
- Trustful

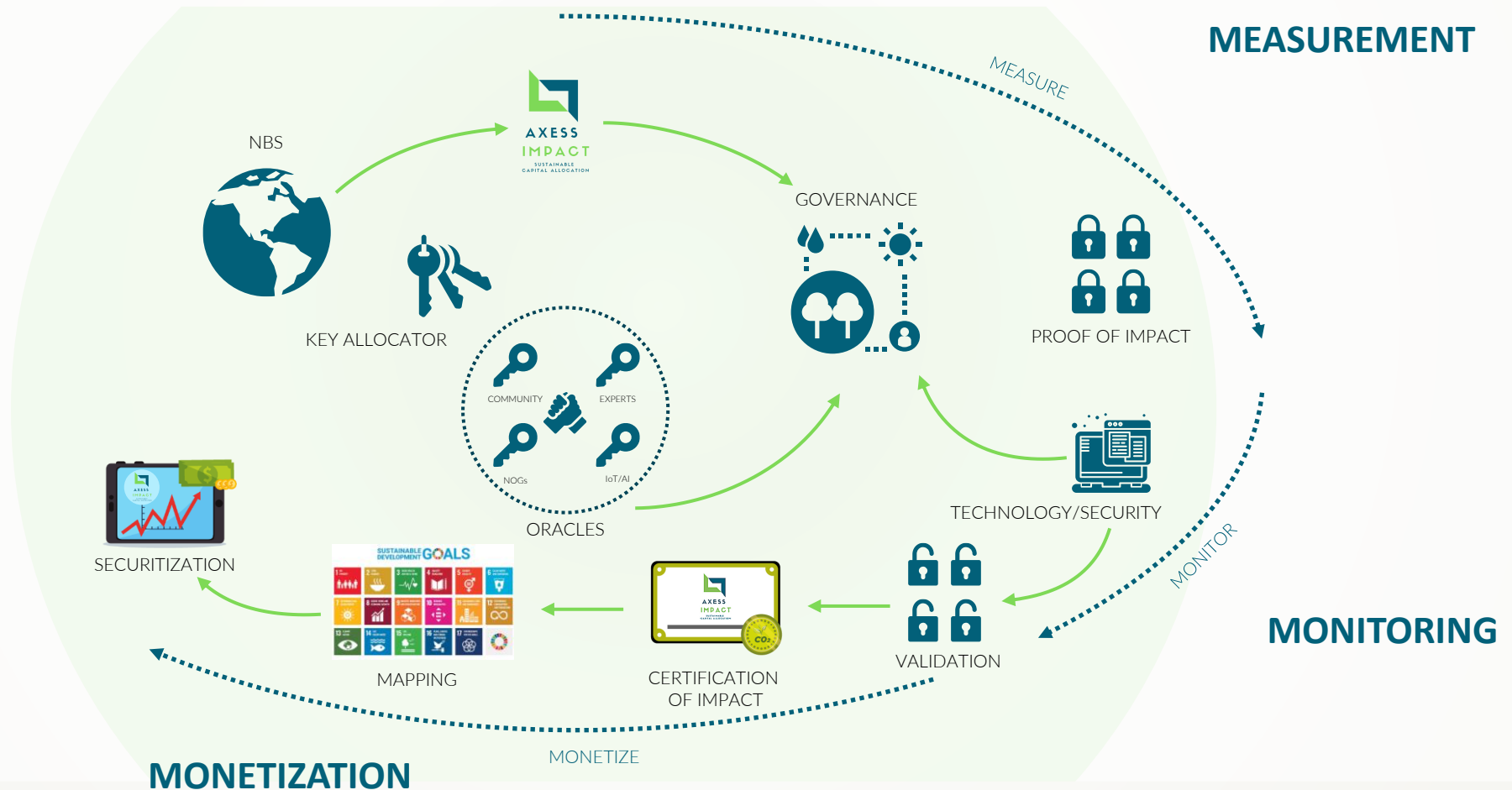
SYSTEMS THINKING  
TO AVOID THE TWIN RISK OF

- Silo Mentality
- Organizational Myopa



# WICKED PROBLEMS... THE 3Ms PROCESS

Distributive and Collaborative by Design

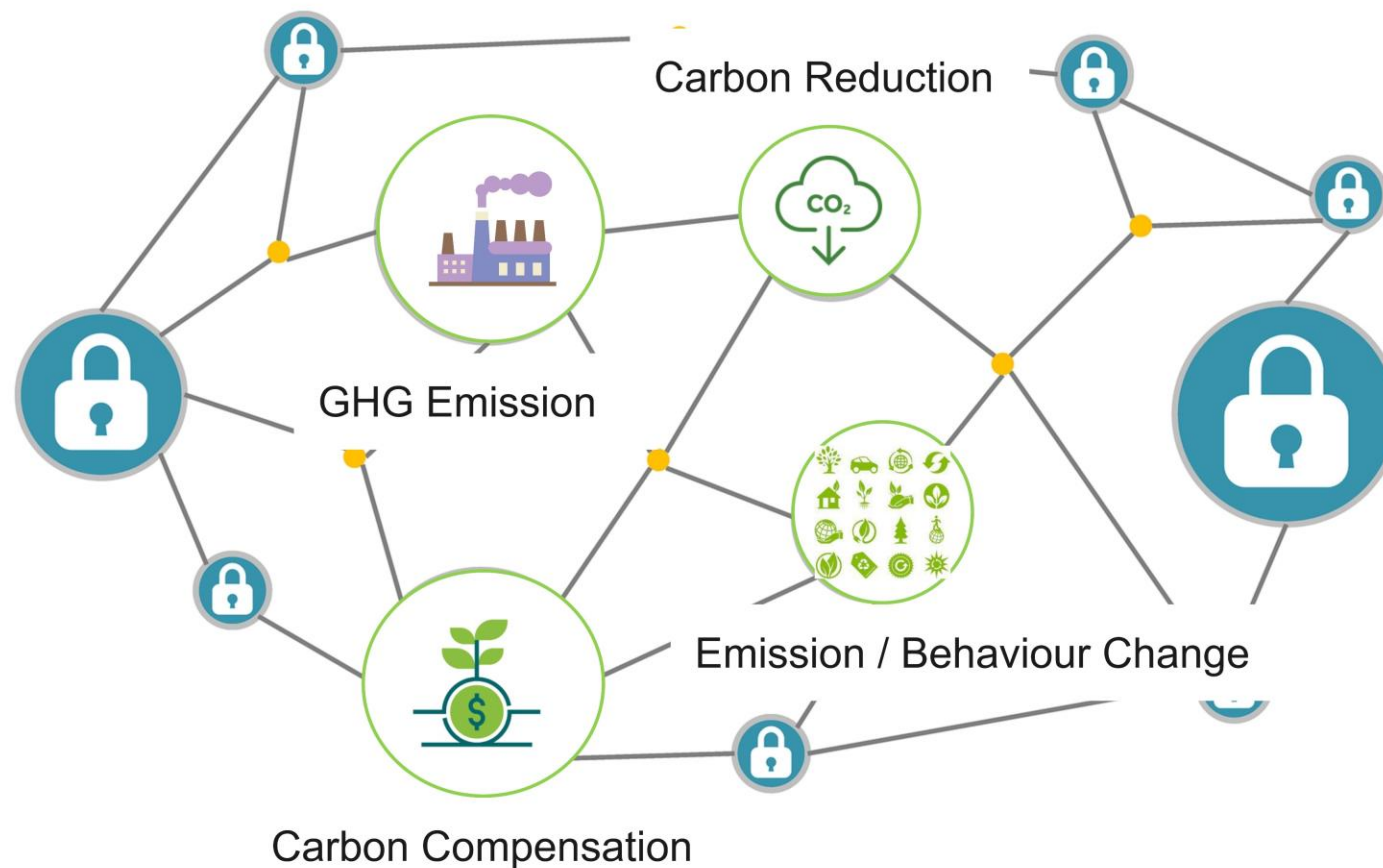




# WICKED PROBLEMS... THE 3Ms PROCESS

Distributive and Collaborative by Design

**TEMPORAL**

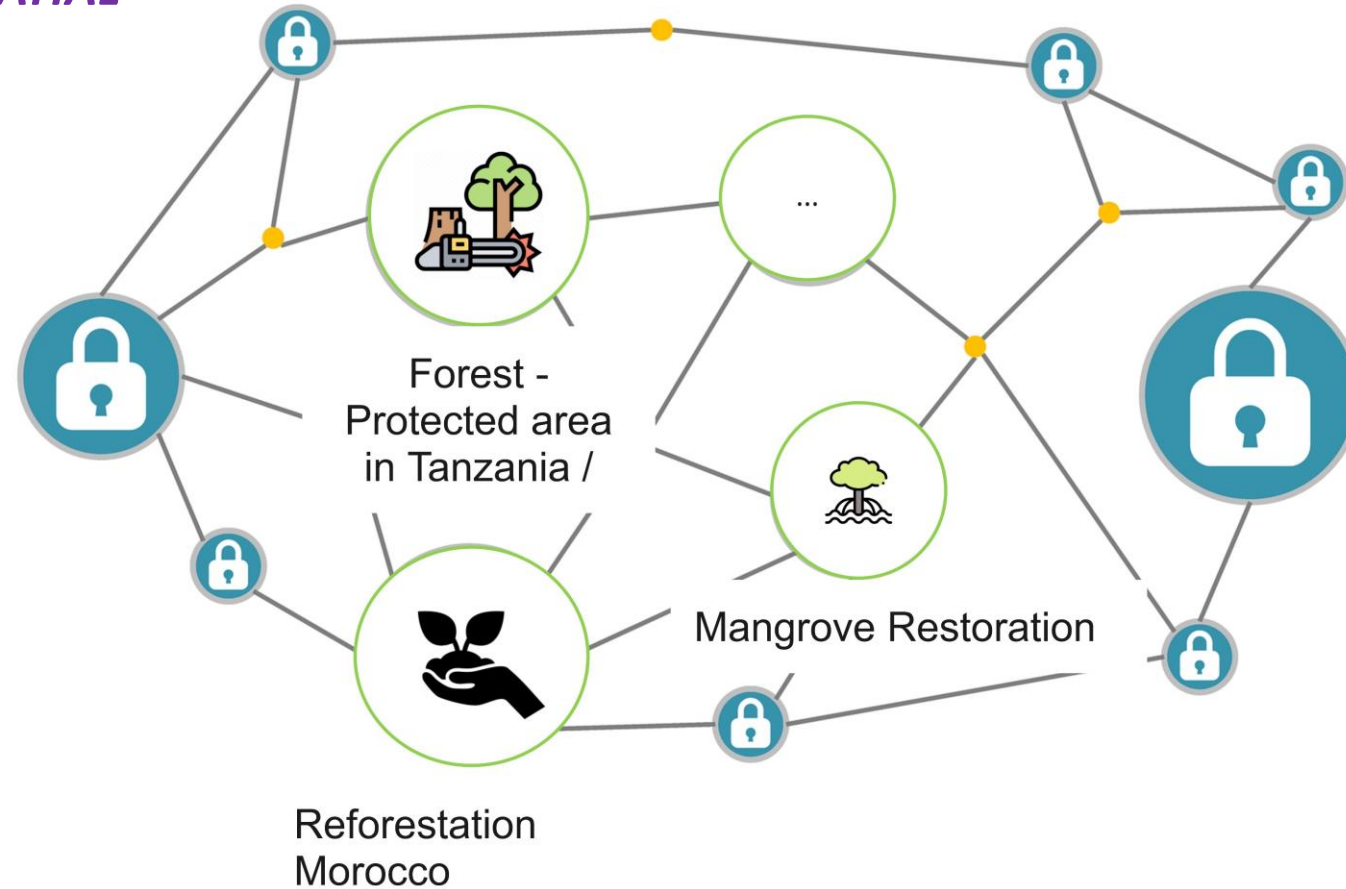




# WICKED PROBLEMS... THE 3Ms PROCESS

Distributive and Collaborative by Design

## SPATIAL

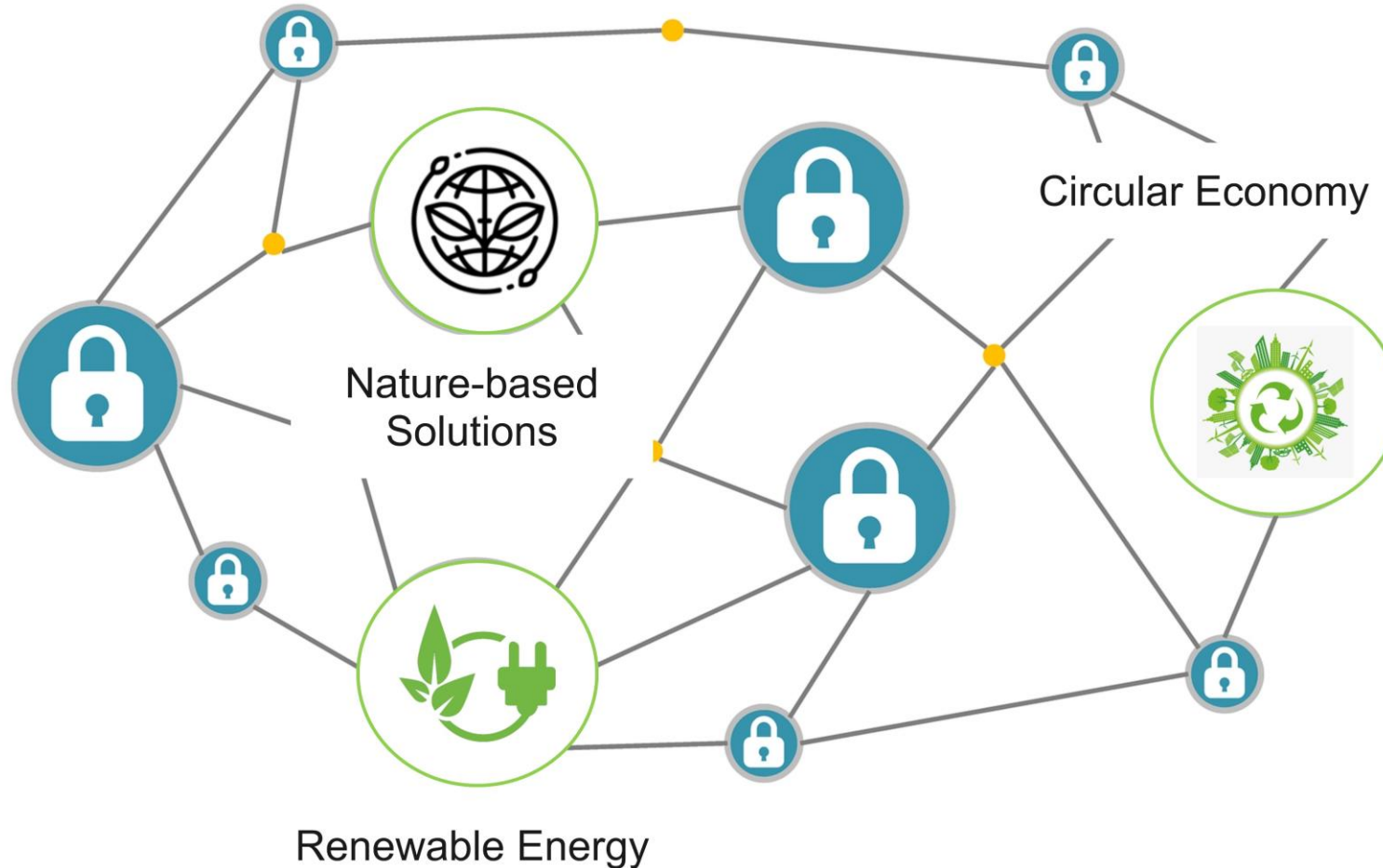




# WICKED PROBLEMS... THE 3Ms PROCESS

Distributive and Collaborative by Design

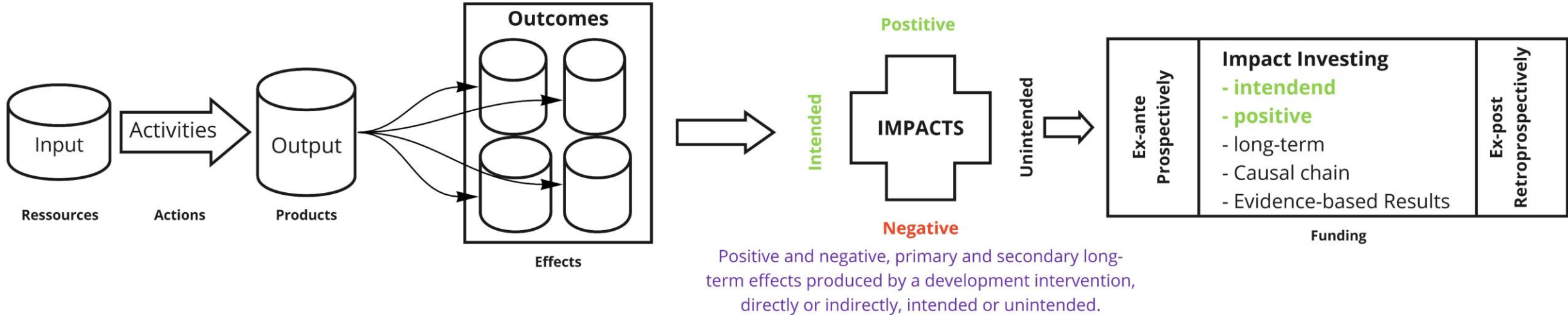
## MULTI-SOLUTIONS





# FROM ADDITIONALITY...TO THE 3Ms PROCESS

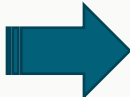
Distributive and Collaborative by Design



Additionality: Trust in Measurement & Monitoring

AxessImpact: Value Chain of Impact

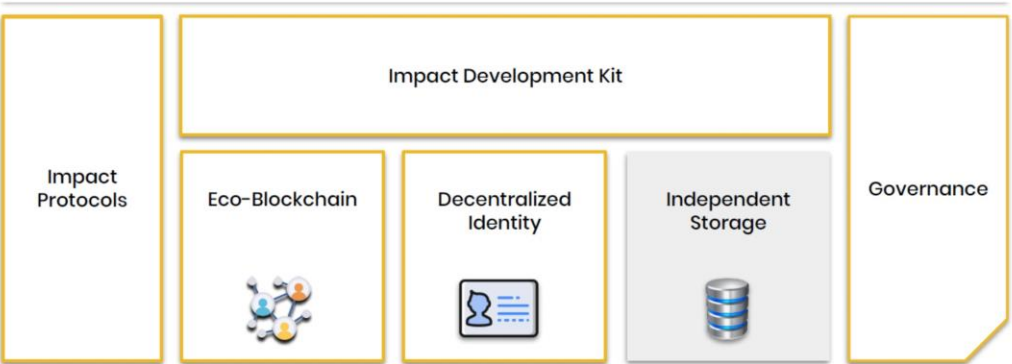
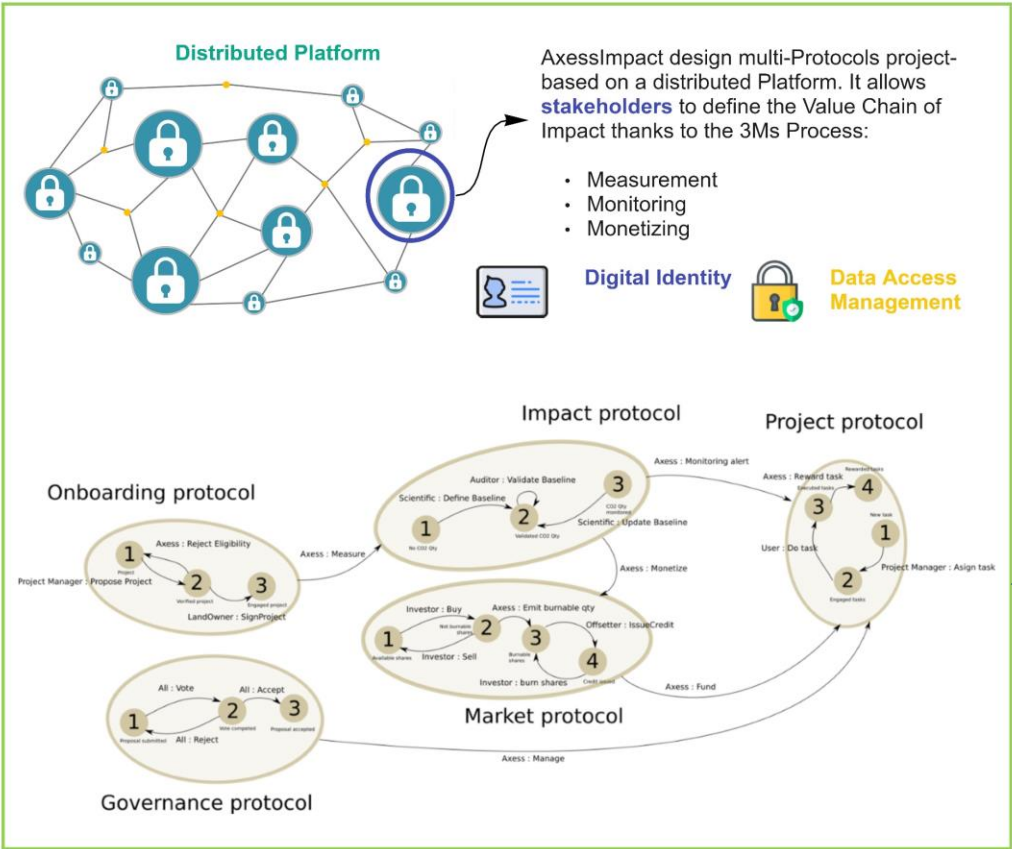
FROM ADDITIONALITY



TO IMPACT



# FROM ADDITIONALITY...TO THE 3Ms PROCESS



TO IMPACT

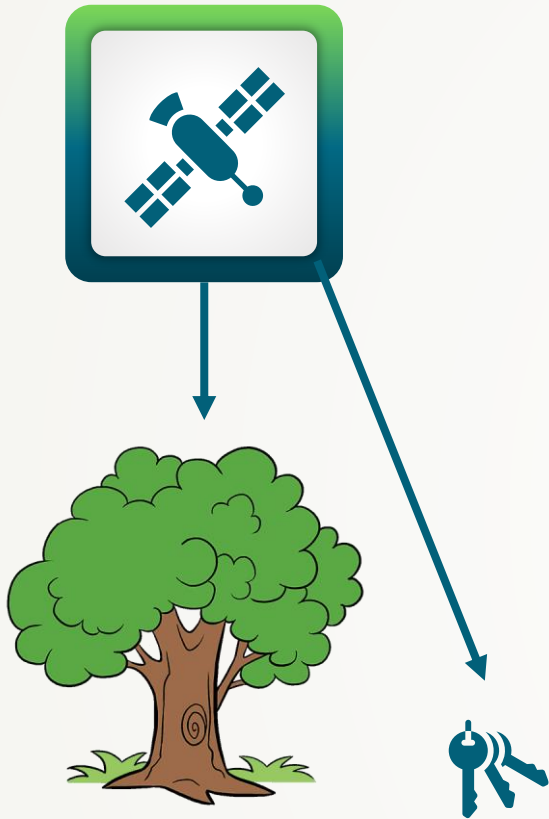
FROM ADDITIONALITY

## HOW TECHNOLOGY AND BLOCKCHAIN IS THE ENABLER OF VALUE CREATION OF THE 3Ms PROCESS

- Allow a Multi-stakeholder Approach – Distributed Pool of Data and Knowledge.
- Bring **Trust** to investors – Private/Public & Ex-ante vs Ex-post.
- Temporal **Traceability** – avoid double spending & claiming
- **Transparency** to measure and monitor the Value Chain of Impact: Co-benefits
- Governance – **Revenue Sharing** and Resilience – Communities / Stakeholders.
- **Scalability** – Multi-protocols: Spatial and Multi-Solutions.

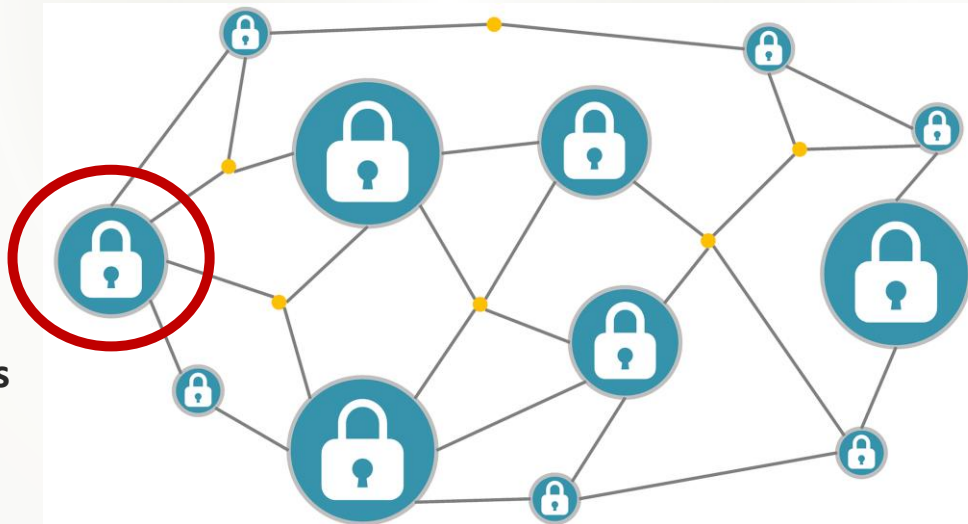


# FROM ADDITIONALITY...TO THE 3Ms PROCESS



**Validator = Stakeholders  
Known Participants**

**A blockchain oracle** is any device or entity that connects a deterministic blockchain with off-chain data. These oracles enter every data input through an external transaction. This way, we can be sure that the blockchain itself contains all of the information required to verify itself. This is why oracles are known as blockchain middleware: They are the bridge between the two worlds.



**consensus protocols that do not require a native cryptocurrency**





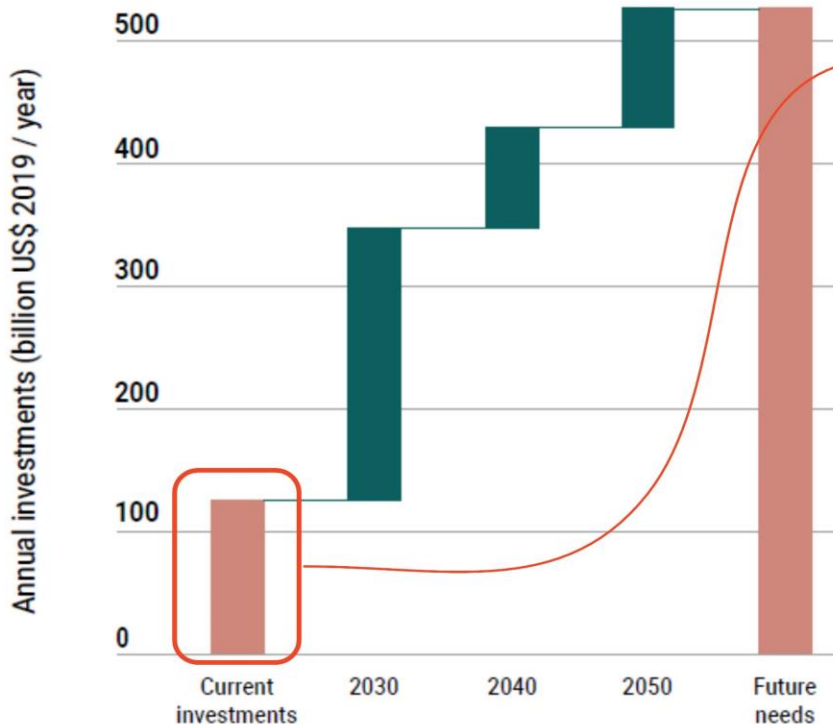
# FINANCING GAP... THE 3Ms PROCESS

By 2050, total investment needs will amount to **USD 8.4 trillion** cumulatively. These estimates are based on an immediate action scenario, in which the global community is assumed to act now to halt climate change at 2 degrees

**Definition:** Nature-based Solutions (NbS) are defined as “Actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human wellbeing and biodiversity benefits”

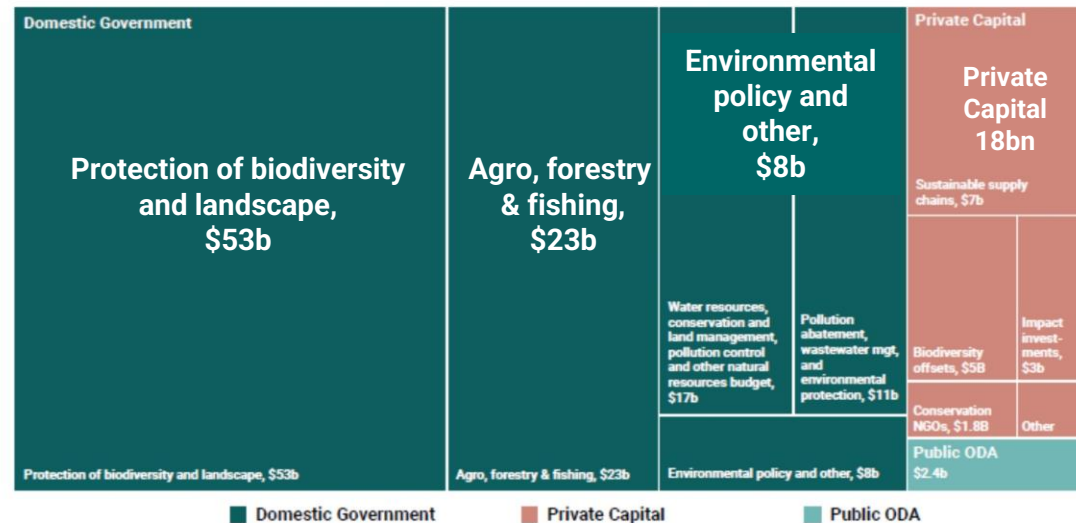
Source: IUCN

Future investment needs charting an accelerating rate over time



Public-sector financing accounts for 86 per cent of the approximately USD 133 billion invested annually in NbS

**Private Sector**



**In order to meet future climate, biodiversity and land degradation targets, public and private actors will need to scale up their annual investments**

Source: State of Finance for Nature - 2021 UNEP



# FINANCING GAP... THE 3Ms PROCESS

TIME HORIZON – PROJECT DEPENDENT

Ex-ante  
Investor

Landowner  
Property Rights

Ex-post  
Emitter / Investors



Impact Investor  
Asset Manager / Fondation



Dashboard



Investment Vehicle  
Connected to the  
Blockchain



Mapping SDGs  
Co-benefits





# PART I

## KEY TAKE-AWAYS

### **Climate Change and Biodiversity Loss are Wicked Problems need Collective Actions:**

- Multi-Stakeholders
- Systems Thinking

### **Financing Gap & Trust:**

- Private-Public Partnership – structured and blended finance
- Dashboard: Ex-ante & Ex-post Investors to reduce the lag times and improve demand signals

### **Value Chain of Impact & Traceability at regular intervals:**

- Co-benefits and high quality SDGs Certificates / Carbon Credits: “Core & Attributes”
- Revenue sharing: Communities – Nature – Stakeholders

### **Scalability:**

- Multi-protocols
- Space & Time & Solutions



## PART II

# IN PRACTICE: CARBON MARKET

“I don’t think the industry has done enough to develop evidence to show that it works - [to] show the actual outcomes of this projects -, this is what is really impeding the growth of the CO2 market.”

Source: Austin Whitman, CEO of Climate Neutral 09/2020

**IMPACTS ASSESSMENT, TRANSPARENCY AND TRUST AS THE CHALLENGES FOR THE LACK OF GROWTH IN THE CARBON MARKET**

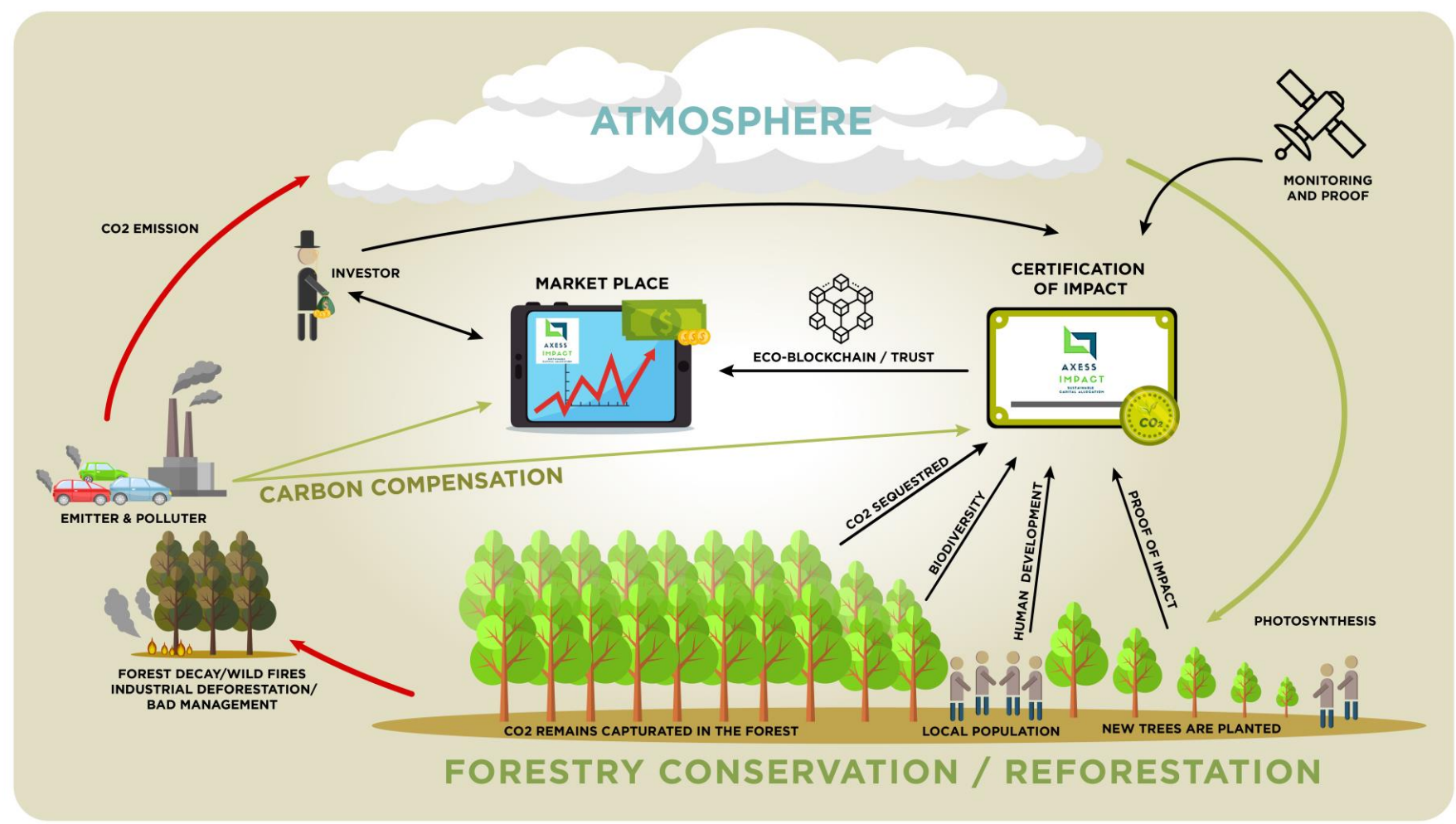


# Problem to Opportunity : Carbon Market



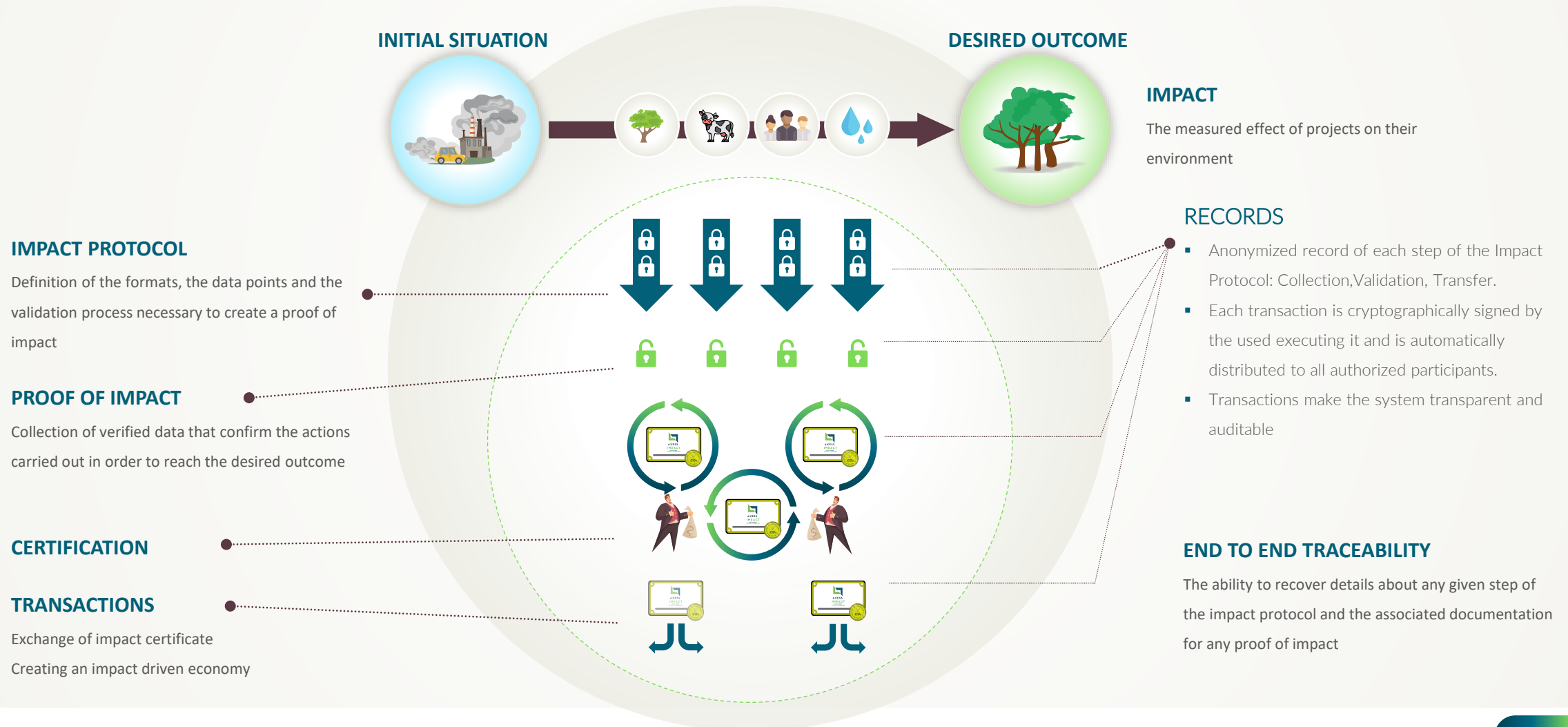


# THE VIRTUOUS CYCLE



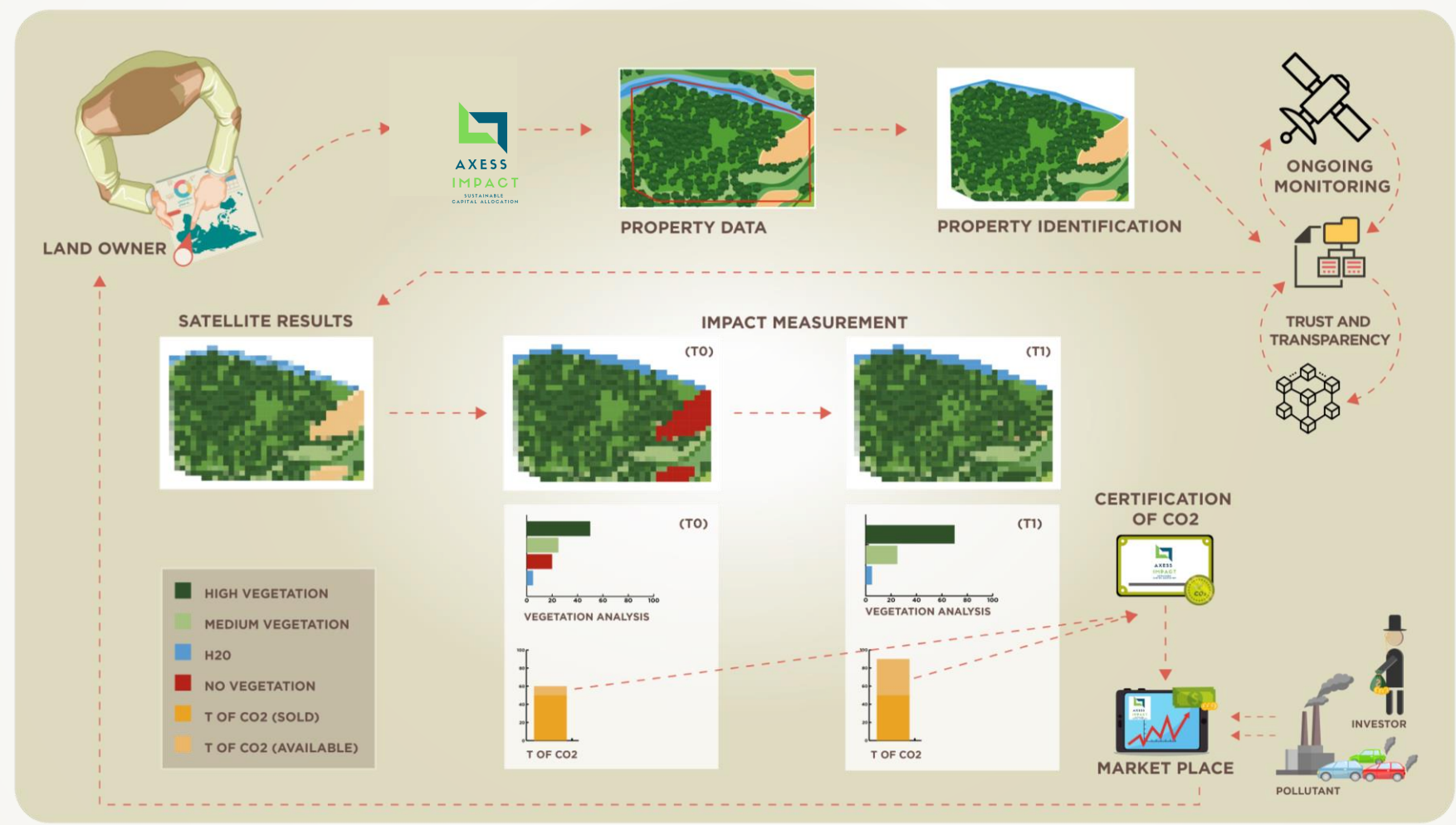


# MEASURING





# MONITORING

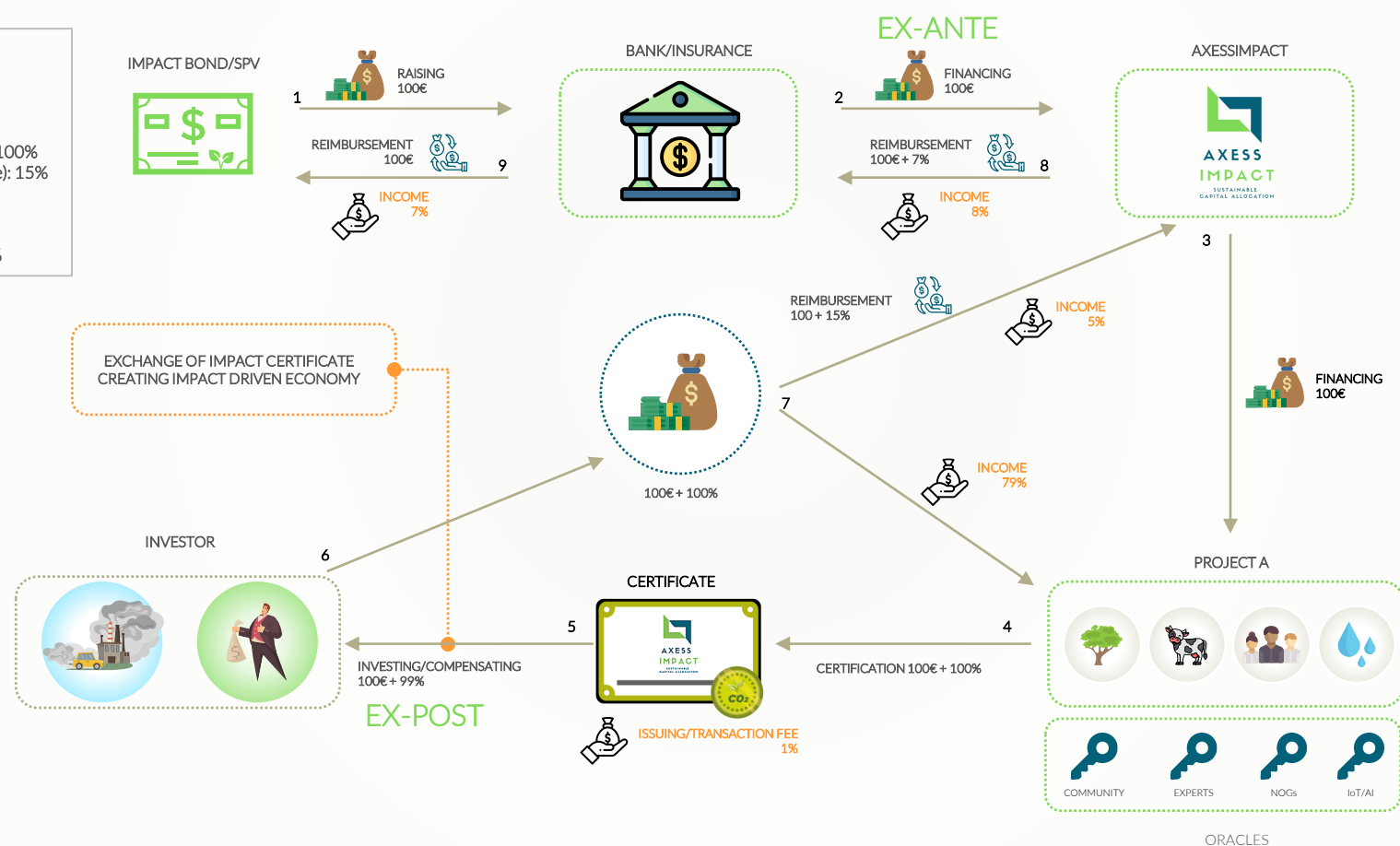




# MONETIZING EX-ANTE + EX-POST

## HYPOTHESIS:

- PROJECT A is Eligible
- Cost of project: 100€
- Value of the project: 100€ + 100%
- Coupon for investor (Ex-Ante): 15%
- Axessimpact fee: 5%
- Issuing/Transaction Fee: 1%
- Valorization of ProjectA: 79%





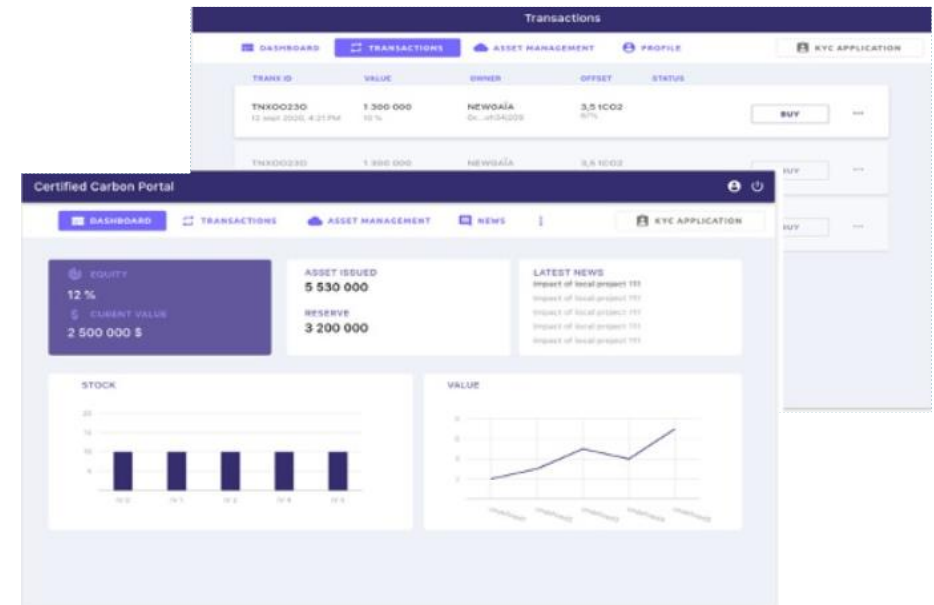
# THANKS TO OUR UNIQUE TECHNOLOGY

## Stakeholder Management

- KYC: manage stakeholder identity and access
- Governanace: involve stakeholders in decision making
- Reporting: evolution of carbon credits owned by organization
- Actualization: satellite management system to evaluate asset value

## Asset Management

- Protocols implementation and standard compliance
- VCS (verified carbon standard) registry integration
- Issuance/Project details
- Documents Management





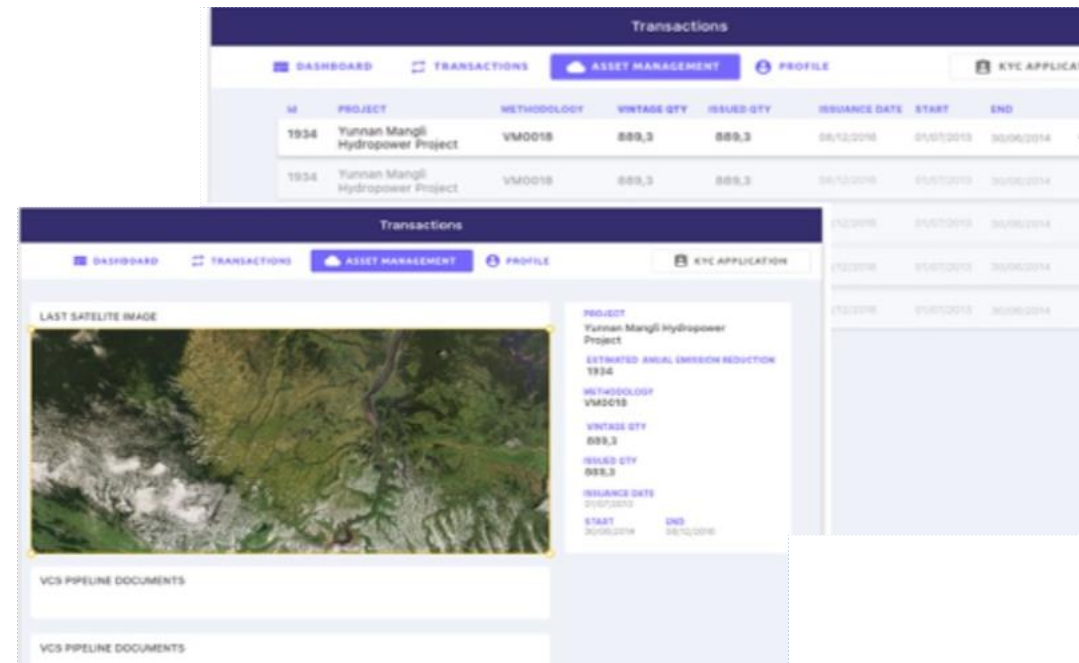
# THANKS TO OUR UNIQUE TECHNOLOGY

## Scaling Initialisation

- Decentralisation
- Source mapping
- Data collection
- File verification network

## Automating issuance

- Taskforce certification and tools
- Verification protocol
- Co-benefit valuation



| ID   | PROJECT                          | METHODOLOGY | VINTAGE QTY | ISSUED QTY | ISSUANCE DATE | START      | END        |
|------|----------------------------------|-------------|-------------|------------|---------------|------------|------------|
| 1934 | Yunnan Mangli Hydropower Project | VM0018      | 889,3       | 889,3      | 08/12/2018    | 01/07/2019 | 30/06/2024 |
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| PROJECT                          | ESTIMATED ANNUAL EMISSION REDUCTION | METHODOLOGY | VINTAGE QTY | ISSUED QTY | ISSUANCE DATE | START      | END        |
|----------------------------------|-------------------------------------|-------------|-------------|------------|---------------|------------|------------|
| Yunnan Mangli Hydropower Project | 1934                                | VM0018      | 889,3       | 889,3      | 08/12/2018    | 01/07/2019 | 30/06/2024 |



## IN PRACTICE: A NEW STANDARD



Satellite sensing & data modelling



Eco-blockchain, trust & full transparency



Bottom-up governance integration



Certification of CO2 & proofs of impacts



Monitoring and Visualisation



Market Place and Certificates securitization



# WE BRING IMPACT FINANCE SOLUTIONS

- **Transparency** among stakeholders
- Digital asset creation and exchange based on **real impact evidence**
- Actualisation of the **value** according to ground state
- **Trust** and **strong governance**
- Real impact of **human development**
- **Traceability** for all transactions
- **Proofs** and measures of **sustainability** impact





AXESS  
IMPACT

SUSTAINABLE  
CAPITAL ALLOCATION