



WE GROW YOUR CITIES

TOTAL SOLUTION PITCH DECK



HOLISTIC SOLUTIONS

FOR SUSTAINABLE GROWTH

OUR SOLUTIONS



Regenerative Agriculture &
Phytoremediation



Sustainable Construction
Composites



Bio-based Products &
Biochar solutions



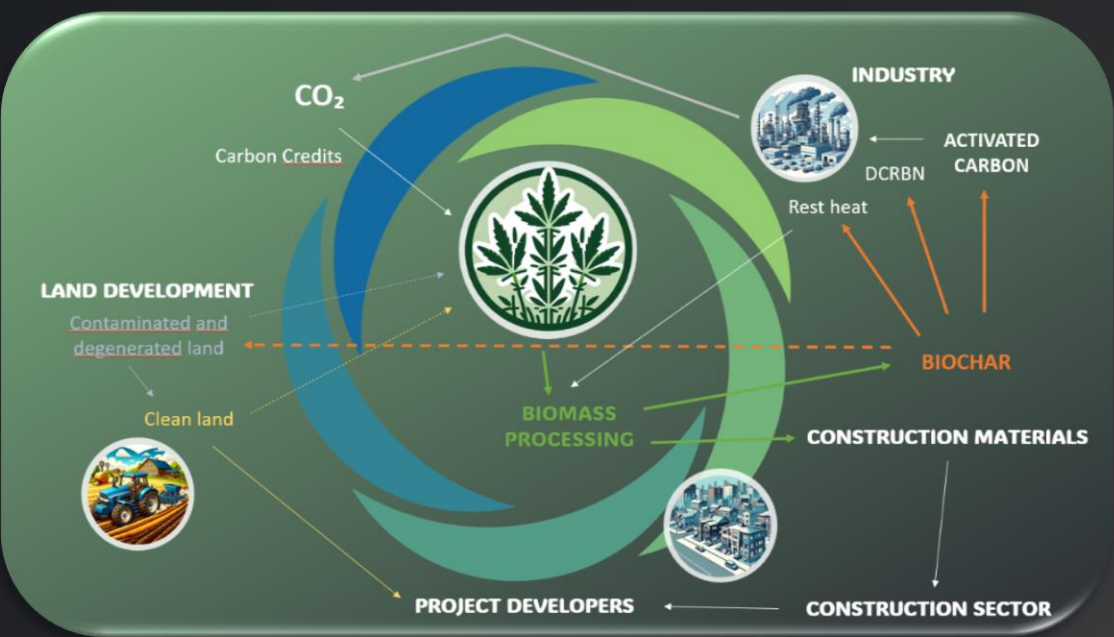
Circular City Ecosystems

TOWARD CIRCULAR CITY ECOSYSTEMS

A holistic vision
Globally implementable

Cleaning polluted/restoring degraded soils
Capturing atmospheric CO2 naturally
Storing CO2 long-term (>50y)
Creating short-chain local and circular products

Circular hubs



Sustainable synergies



We unite industry,
agriculture and
construction in one
single solution.



1. AGRICULTURE AND PHYTOREMEDIATION

Agriculture under pressure



Yield loss

Due to extreme weather (too much/little rain) emphasized by climate change, and soil degradation

Soil quality deterioration

Traditional land usage (e.g. tillage, pesticides) results in poor soil quality, further reducing yields

Regenerative

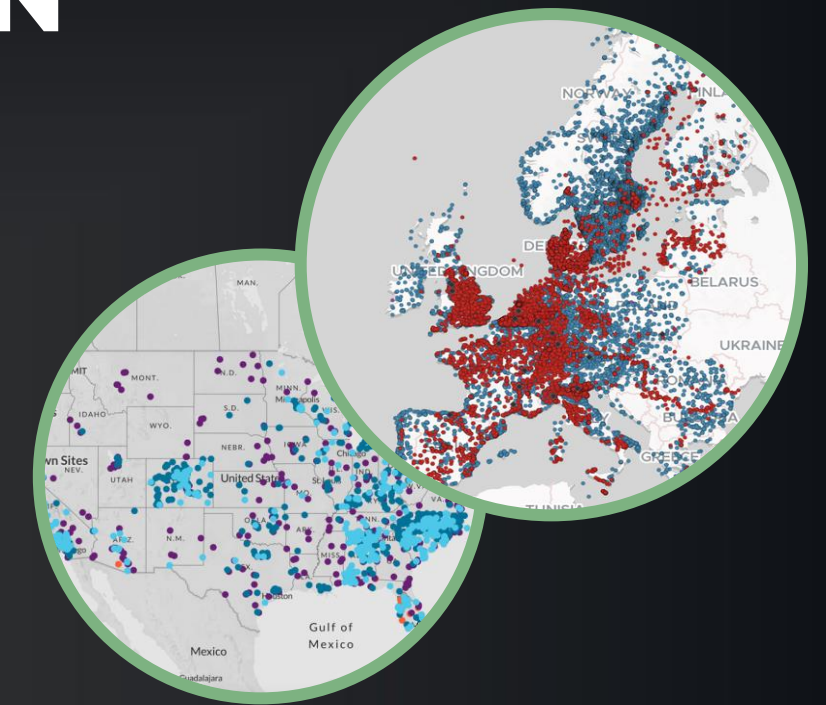
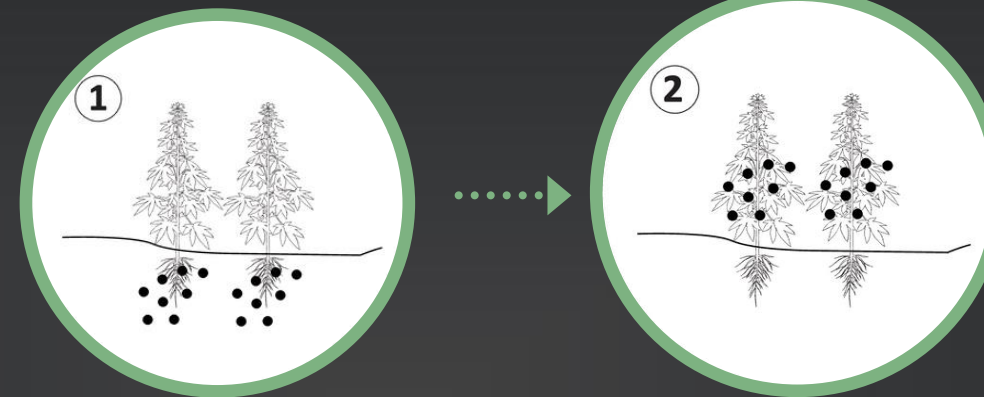
Store water and CO₂, use organic fertilizer, biochar and smart crop rotation (e.g. hemp)

PHYTOLUTIONS



1. AGRICULTURE AND PHYTOREMEDIATION

The world has thousands of hectares of PFAS polluted land



Tradition soil cleaning

Expensive (750K/ha) and unsustainable (excavation, soil washing, bring new soil)

Phyto remediation

Great alternative for pollution up to 50µg/kg DM
Lower in cost & more sustainable
Treatment time 10-20y

Soil usage and restoration

Making unused soils productive and improve their quality, increasing their natural capital and availability for agriculture or ecosystem services

Partnership



2.SUSTAINABLE CONSTRUCTION COMPOSITES

For construction
sector

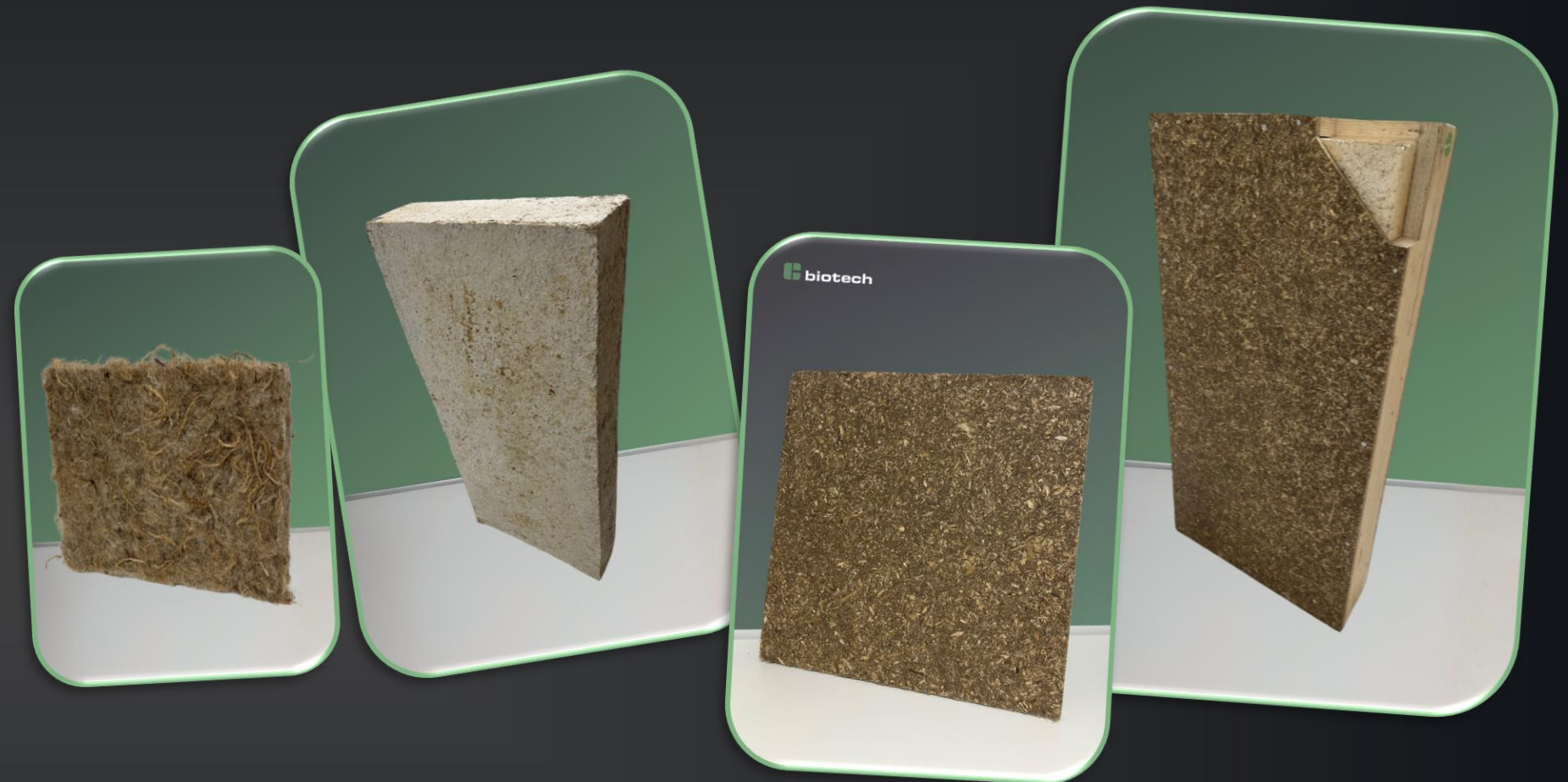


Insulation

Fibre insulation is an alternative for unsustainable products like Rockwool and PUR.

Hempwood

Alternative for wood and concrete. Avoids cutting trees, long supply chains and negative climate impact.



Sandwich panel

Combination of hempwood and mycelium (= fungi), as insulator, for modular, circular carbon negative walls

2.BIO-BASED PRODUCTS

Hemp



Binder

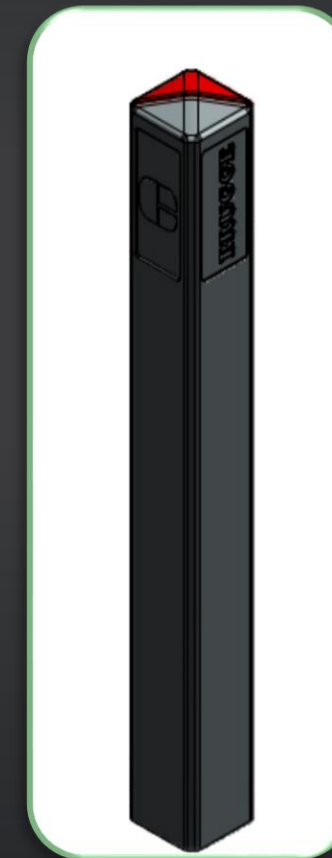


Compounding
(extrusion)

Granulate



Trafiroad
we sign for safety



Extrusion or
Injection moulding

PLASTIC or NOT PLASTIC? 🤔



Bio-composites

Almost net-zero composites to reduce the need for virgin plastic, steel or tropical hardwood. Traffic poles, street furniture are some examples.

2.BIO-BASED PRODUCTS

Biochar through pyrolysis



Hemp pellets

Energy source: heating value 14.8MJ/kg.
CO2 neutral.
Alternative to cutting trees in the global south.

Soil improver

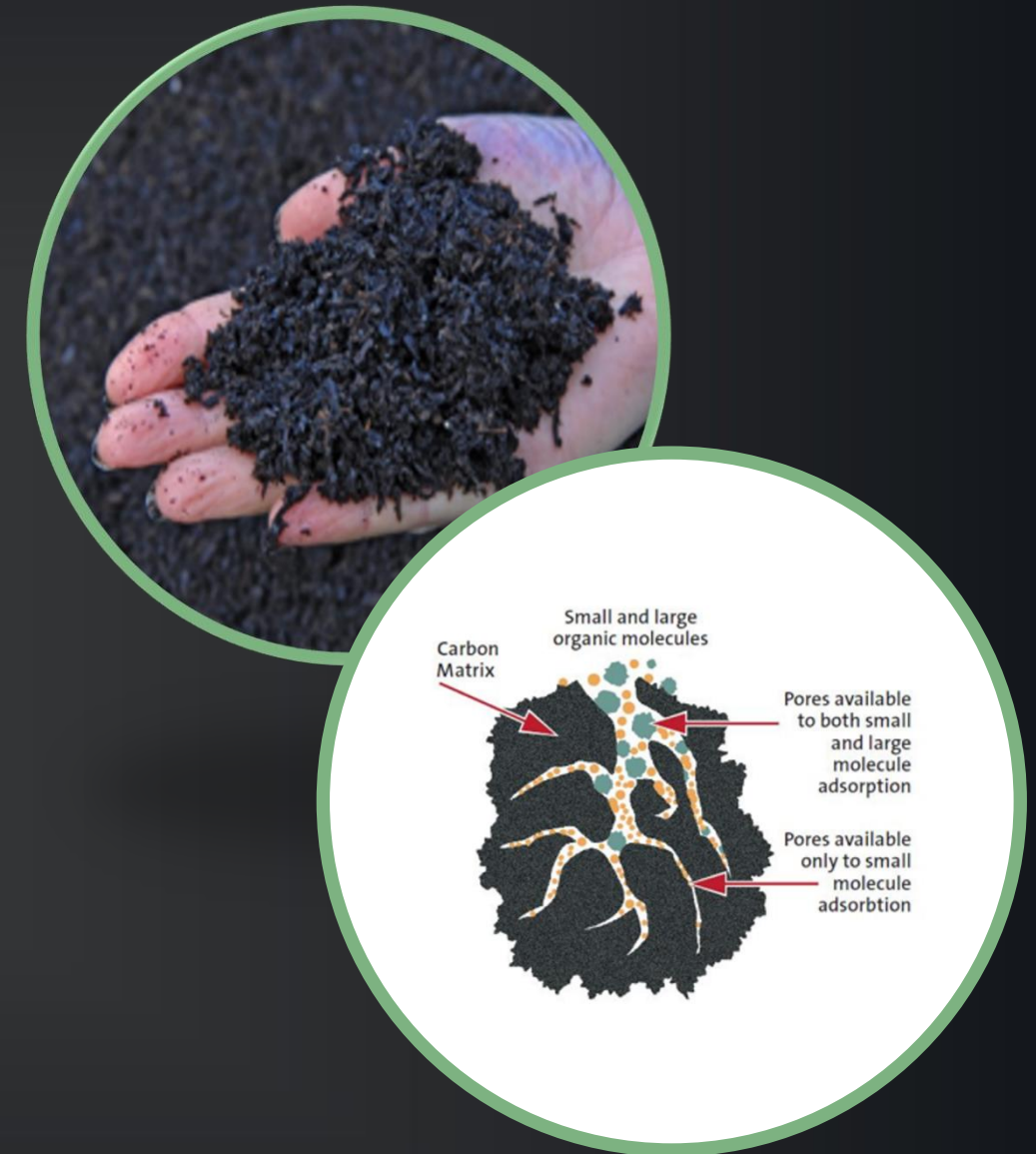
Improves agricultural land
Use on 'poor' soils for
pollutant removal
Counteracts desertification

Activated carbon

Steam or chemical treatment
Usage in wastewater and
off-gas filtration

Carbon pre-cursor

For CCU solutions that need
extra carbon (besides CO2) to
make chemical building blocks



ADDRESSING MULTIPLE PROBLEMS

THE LINEAR ECONOMY INHERITANCE

Soil pollution & degradation

Chemicals, heavy metals, soil degradation, desertification

Alarming CO2 imbalance

Too high influx of fossil carbon, too little carbon sinks

Shortages in raw materials

And excessively long supply chains

Linear waste materials

Piling up landfills causing further pollution

Case Studies & Proof of Concept

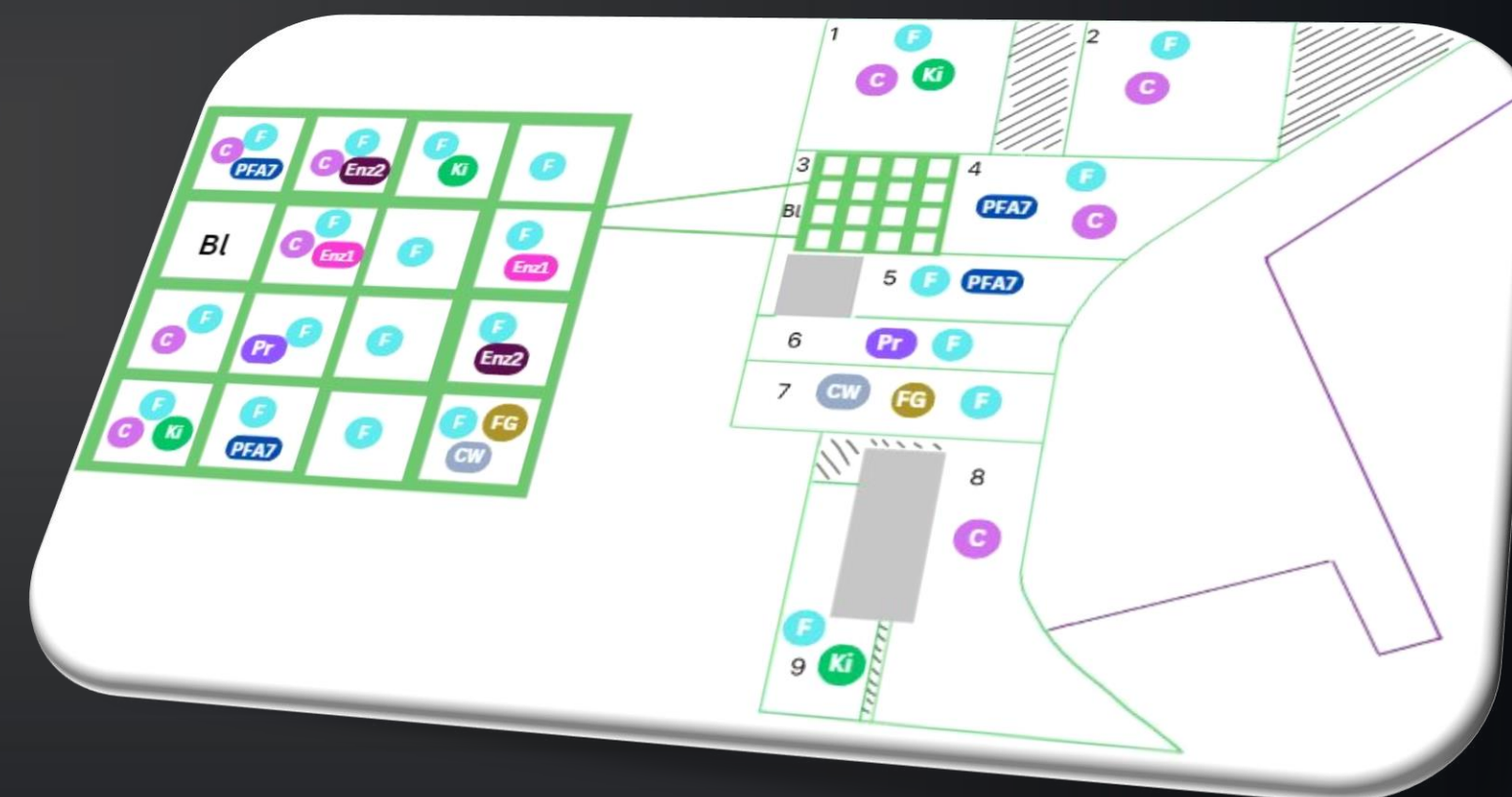
VESTA 

Training site of Belgium fire brigade and police

Historical PFAS pollution in topsoil due to the historical use of firefighting foams during past fire drills and tests.

Demonstrate phytoremediation using industrial hemp

Speed up PFAS extraction by means of soil additives



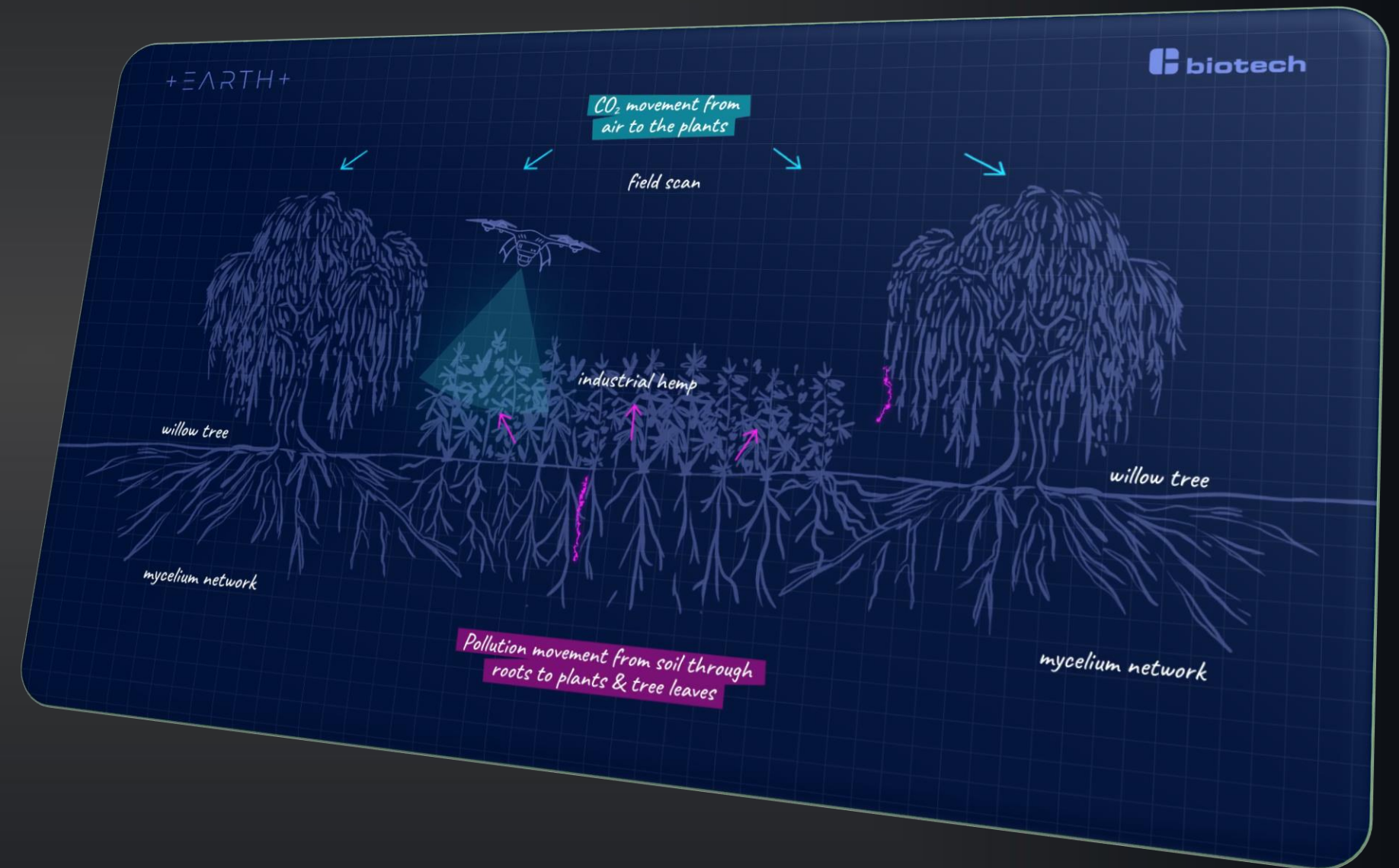
- Plot was divided into
 - 9 large subplots
 - 16 small subplots: no influence of groundwater and leaching
- Different soil additives were applied
- Sampling of soil and leaves biomass at different time points (monthly)
- Analysis of PFAS concentrations
 - LCMS/MS CMA/3/D (36 compounds)



Case Studies & Proof of Concept

VESTA

- PFAS levels were reduced in all subplots between June and September
- Different plots had different initial concentrations and different removal rates
- The majority of the subplots reached the legal norm in 1 cultivation cycle



Case Studies & Proof of Concept

SPAIN (Murcia)

- Groundwater overuse by intensive agriculture (lettuce, broccoli)
- Groundwater and river depletion
- Soil is degrading
- Land was used for centuries to cultivate hemp (e.g. Spanish armada)
- Restore glory by proving hemp can grow there
- Next step: scale up hemp production and create value chain



PLATFORM & TECHNOLOGY

+EARTH+



Impact

Project locations and sizes
Pollution and CO2 removed
Local jobs created
Partners involved



Transparency

AI, satellited & machine learning for
verification of carbon removal in plants
& soils
Life-cycle assessment from soils to
final products
Scientific & educational resources
Carbon credits marketplace

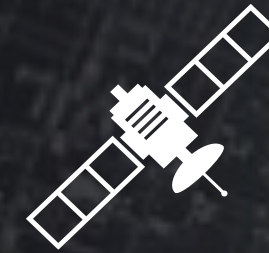


The goal: set our own standards

Impact platform

We don't just sell carbon credits

+ EARTH +



1. Satellite

Verification brings transparency



3. Blockchain

Brings trust



2. Multitennant

Offer us scale & community / magnet effect

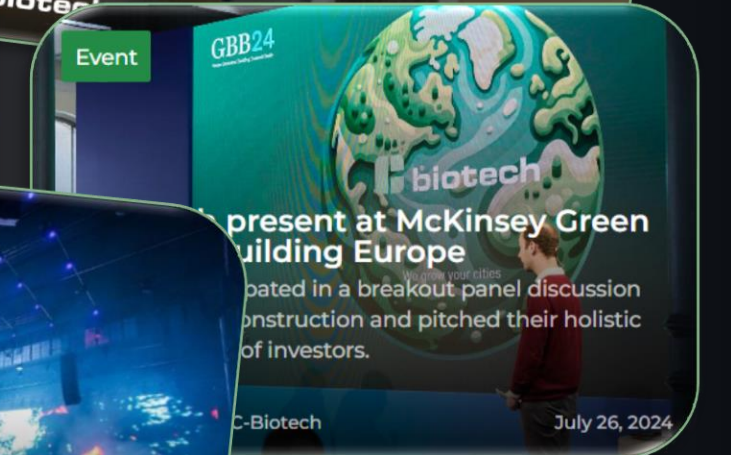
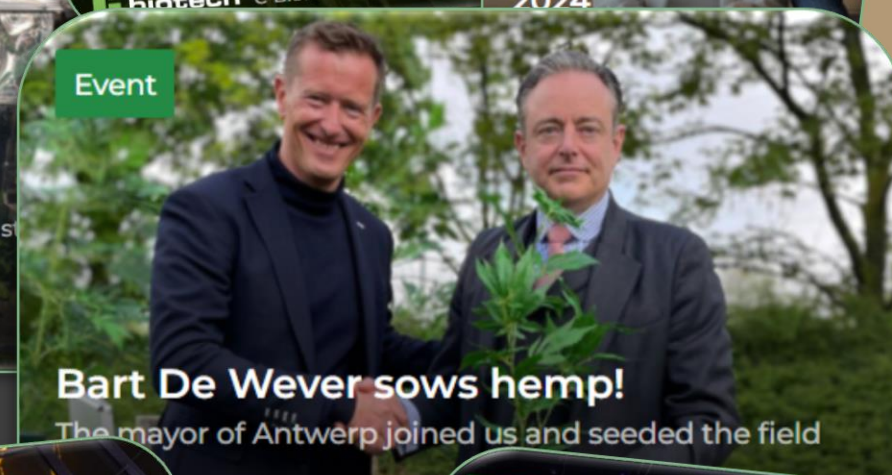


4. Tokenisation & smart contract

Potential to become a financial product

NEWS UPDATES

Winners



OUR PARTNERS IN SUSTAINABILITY

Companies

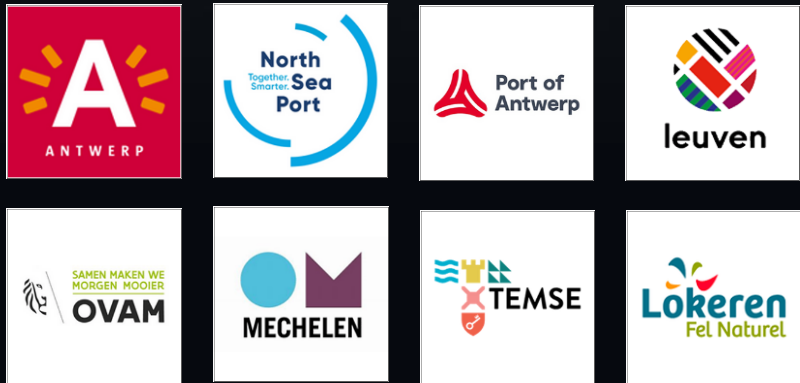


Universities



Highligh1
Highligh2

Cities & Governments



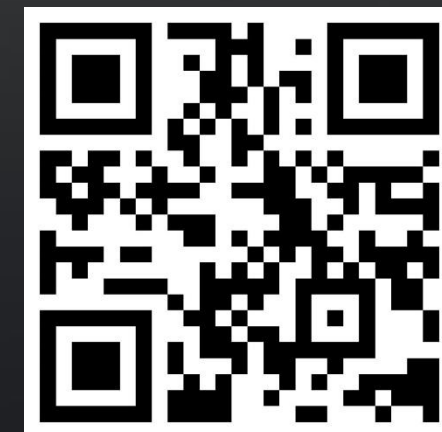
Farmers



Project locations
= scalability od solutions



JOIN US IN GROWING CIRCULAR CITIES



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