PicoChar Lda.

PicoChar addresses **ecological & cultural threats** while **creating sustainable economic value** with biomass.

https://AboutTheAzores.com

Problem

Ecological Threat

Pico Island faces serious ecological threats from invasive species such as **Pittosporum undulatum** that harm its unique biodiversity and cultural heritage.

The **invasive** Pittosporum undulatum spreads rapidly, displacing native vegetation and creating dense monocultures that reduce habitat diversity.

Environmental Impact

This invasive species alters soil chemistry, **disrupts natural ecosystem** processes, and **threatens endemic plant species** that are found nowhere else in the world.

Opportunity

PicoChar identifies an opportunity to **turn these ecological threats into economic opportunities** by leveraging the invasive Pittosporum undulatum and other invasive wood species for sustainable business ventures.

https://picochar.com

Pittosporum undulatum - Invasive species threatening Pico Island's ecosystem

European agricultural policy is on our side

Solution

1

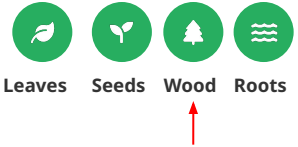
Cut Invasive Species

Cut Pittosporum undulatum and other invasive species in the National Park on Pico Island

2

Utilize Every Part

Use every part of the tree
to create **products** and services



3

Replant Endemic Species

Replant new endemic species

(Cryptomeria japonica or other plants based on government instructions and availability)

Carbon farming plays a vital role in the **EU's climate action strategy** by enabling agriculture to act as a net carbon sink, sequestering carbon in soil and vegetation while reducing emissions.

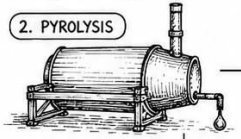
BIOCHAR PYROLYSIS – MULTIPLE PRODUCTS, MULTIPLE SOLUTIONS

From Waste to Wealth – Regenerating Soil, Restoring Environment, Generating Carbon Credits

1. FEEDSTOCKS

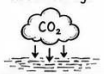
Agri residues,
Wood waste,
Leaves, Stubble,
Prunings, etc.

2. PYROLYSIS



Syngas
(CO, H_2, CH_4)
(Captured & used)

ENERGY RECOVERY
Heat, Electricity
for pyrolysis
or other use

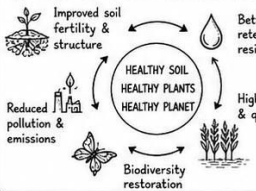
3. PRODUCTS & THEIR USES	BIOCHAR	BIO-OIL	WOOD VINEGAR	SYNGAS	CHARCOAL / ACTIVATED CARBON	ASH	HEAT
	USES • Soil amendment • Water retention • Nutrient holding • Compost enhancer • Livestock bedding • Erosion control	USES • Bio-pesticides • Bio-herbicides • Plant growth stimulants • Soil conditioners • Wood preservative	USES • Bio-pesticides • Soil & seed treatment • pH adjustment • Plant growth enhancer • Odor control	USES • Energy generation • Cooking fuel • Electricity • Heat supply • Can be converted to hydrogen	USES • Water purification • Air filtration • Activated carbon • Soil remediation • Industrial uses	USES • Soil amendment (minerals) • pH correction • Potash source • Compost additive	USES • Drying crops • Greenhouses • Food processing • Water heating • Industrial use
4. DIRECT BENEFITS	Improves soil health & fertility Increases yield	Protects plants naturally Reduces chemical use	Enhances growth Improves soil microbial activity	Provides clean renewable energy Reduces fossil fuel use	Cleans water & air Environment protection	Returns minerals to soil Improves soil structure	Supports farm operations Increases efficiency
5. INDIRECT BENEFITS	Carbon sequestration Long term soil carbon storage 	Reduces synthetic chemical pollution Supports biodiversity	Improves soil ecosystem Reduces disease incidence	Lower emissions Cleaner air Energy security	Remediates polluted soil & water bodies	Promotes balanced nutrition Reduces need for synthetic fertilizers	Reduces post harvest losses Supports value addition

6. CARBON CREDITS

Biochar locks carbon in soil for hundreds to thousands of years.

Benefits:
- ✓ Verifiable carbon removal
- ✓ Generate carbon credits
- ✓ Additional farmer income
- ✓ Supports climate action
- ✓ Builds a sustainable future

7. REGENERATIVE AGRICULTURE OUTCOMES



8. SUSTAINABILITY IMPACT

- ✓ Waste to wealth
- ✓ Climate change mitigation
- ✓ Restores ecosystems
- ✓ Conserves natural resources
- ✓ Supports food security
- ✓ Creates green jobs & livelihoods

ONE TECHNOLOGY – MANY PRODUCTS – ENDLESS BENEFITS
FOR SOIL, FARMER, ENVIRONMENT AND FUTURE GENERATIONS

Dr N Sai Bhaskar Reddy
Biochar Channel

Our request(s) | actions | milestones

Resource Requirements

Funding
For development, initial operations, and research
20.000 EUR, startup company, cutting materials, sample products

Authorizations & permits
For harvesting and processing operations

Strategic partnerships
With local farmers and agricultural organizations
With local nurseries for replantation(s) & introductions to farmers

Facilities
Office location and initial processing facility setup

Team Expansion (locals in Pico)

- **Sales specialist**
- Agricultural scientist
- Production manager
- Marketing specialist

Team (for startup)

Bart Van Herreweghe

Founder & CEO

- 15+ years experience in business management
- Expert in commerce & finance & marketing

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Johan Agneessens

Founer & COO & Expert in Product Building

- 20+ years experience in product development
- Deep knowledge of agricultural needs

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Koen Meuwissen

Founder & Innovation

- Organiser of "Klimaatparlement"
- Deep knowledge of nature based products

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