#### **BIOLOGICALLY-ENHANCED CARBON STORAGE**







### **Problem**

EU wants to be carbon neutral by 2050.

EU ETS - world's largest mandatory carbon market, regulates 11.000 companies who are legally mandated to offset their CO2 emissions.

The EU-CBAM rule will extend legal requirements/burden regarding CO2 emissions to non-EU companies that export goods to EU from aluminum, cement, iron/steel, fertilizers, hydrogen and electricity sectors.

Companies which are not able to reduce their CO2 emission to legally acceptable level, are forced to buy carbon credits/offsets on the market.



# **BIOCARST** solution

**BIOCARST PROCESS SCHEME** 

Biotechnology that accelerates dissolution of magnesium-rich mine tailings and permanent storage of CO2 in form of magnesium carbonate minerals by application of bacteria and microalgae.



### Advantages of BIOCARST

Permanent CO2 storage.

**Turning waste into value** and reducing environmental impact of the mine tailings.

Accurate and reliable measurement of the stored carbon dioxide.

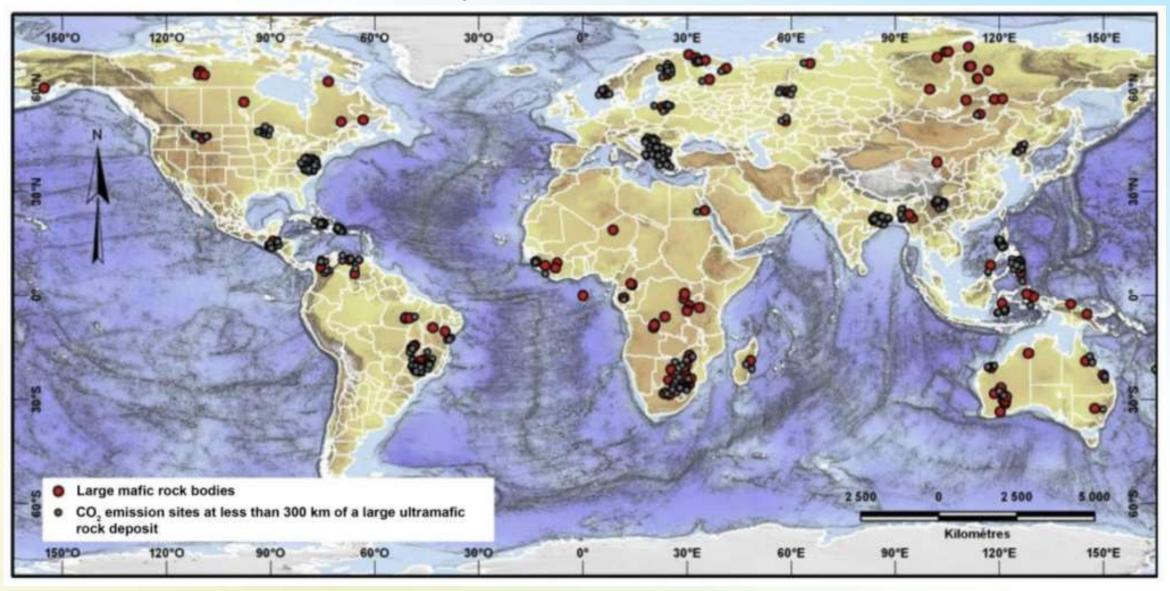
Lowest cost per ton of CO2 captured in industry – below 100 USD Part of 800 Mt of ultramafic tailings available in Quebec





# **Global potenital for application**

Numerous tailings sites worldwide suitable for application of BIOCARST process





## **Business model**

#### Markets:

- Mandatory carbon markets EU ETS, USA, Canada, Australia
- Voluntary carbon market companies willing to buy carbon offsets and pay high price for CO2 storage in order to support emerging technologies (for example Frontier, carbon trading platfrom funded by world's most valuable companies)

#### **B2b business model:**

- Sales of carbon credits in mandatory/voluntary markets (indirect sales via specialized platforms)
- Selling carbon offsets directly to partners (carbon intensive industries).



### **Revenue model**

Selling carbon offsets in advance during first two years, up to 5000 t per year to 2-3 early adopters (for example Frontier).

Store up to 10.000 t of CO2 on a small scale demonstration plant from 2026 and sell carbon credits on a voluntary carbon market. Store minimum 100.000 t of CO2 annually from 2028. Sell credits on a EU ETS market, or directly to partner companies.



## **Revenue forecast**

After validatiing technology on a demo-scale we will sell carbon storage at a price for a premium product. The price of 300 EUR/t corresponds to pricing of similar technologies at voluntary carbon market. From 2028 large scale sales – pricing corresponds to estimated price on EU ETS market.

Year	Sold (t)	Price per t (EUR)	Revenue (EUR)
2024	2.000	300	600.000
2025	5.000	300	1.500.000
2026	10.000	300	3.000.000
2027	10.000	300	3.000.000
2028	100.000	125	12.500.000

It is difficult to identify any other industries with such a great potential, and constrained and challenged supply



# **Key milestones**

Proof of concept.

Viable pilot development and IP registration. First sales and private investment.

Demo scale plant. First recurring revenues and series A investment.

Large scale plant. Series B investment, reccuring revenues.

We are here...

... and our next goal is to be here in 2025...

... and here in 2026...

...from 2028 minimum 100.000 t CO2 captured and stored per year.



# **Founders and supporters**



#### Dipl. Ing. Srdjan Vlajković, Chief Executive Officer, co-founder

Mining engineer with many years of international experience and serial entepreneur. Before BioCarst Srdjan founded RigCode, a successful start-up company that developed software for optimization of drilling in oil and gas industry.



Dr. Srdjan Stanković, Chief Scientific Officer, co-founder Scientist - internationally recognized expert in geomicrobiology and biohydrometallurgy with background in microbiology and geoscience. Before founding BioCarst Srdjan worked at **Federal Institute for Geosciences and Natural Resources (BGR) in Hannover,** Germany. Now, Srdjan is a senior research scientist at University of Belgrade, Faculty of **Biology** 



University of Belgrade, Faculty of Mining and Geology Scientific partner

