

# Tech Venture Challenge – ReduCO<sub>2</sub>

## Conducting a Market Analysis and Developing a Business Plan for ReduCO<sub>2</sub> within a Research Transfer

### Challenge description

ReduCO<sub>2</sub> is rethinking how we produce one of the world's most critical materials, graphite, by turning CO<sub>2</sub> into a resource instead of waste. As demand for graphite in batteries and clean technologies rises, supply remains carbon-intensive and heavily dependent on China, which controls about 90% of the market. Driven by the rapid growth of electric vehicles, the graphite market is expected to grow 2-3× over the next decade, reaching 70 billion EUR in 2035. At ReduCO<sub>2</sub>, we are developing a breakthrough process that mimics natural geological graphite formation to create high-quality, carbon-negative graphite without harmful reagents. This enables safe, long-term CO<sub>2</sub> storage and supports the transformation of the mobility sector.

### Thesis Focus

Within your master thesis, you will work on research related to:

- Conduct a market analysis of the graphite industry, with emphasis on demand, growth opportunities, and major market participants.
- Identify target industries, such as EV batteries, graphite processing, electronics, and steel, and assess customer requirements for graphite.
- Analyze the competitive landscape, including existing graphite-based materials and alternative producers.
- Develop a comprehensive business plan, incorporating pricing strategies and market entry approaches.
- Identify key barriers to market entry and propose strategies to address them.
- Develop financial models and projections to support the scaling of graphite production and distribution.

### Profile and process

You apply with a motivation letter and a CV (but no project draft) and write a master thesis suitable to your study program. You should have:

- Demonstrated motivation to innovate and drive change in the graphite industry.
- Background in business, management, or a related field.
- Experience or strong interest in entrepreneurship and business development.
- Exceptional analytical and creative problem-solving skills.
- Willingness to take responsibility and work independently.
- Strong team player attitude.

- A strong commitment to sustainability and a genuine interest in contributing to the transition toward a greener, more responsible industry.
- Ambition to join ReduCO<sub>2</sub> and help transform cutting-edge research into impactful real-world solutions

Upon successful application, you will become part of the TUM Entrepreneurial Masterclass and enjoy all its benefits.

### **TUM Entrepreneurial Masterclass**

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