

# Pioneering Cement-free Construction

June| 2023

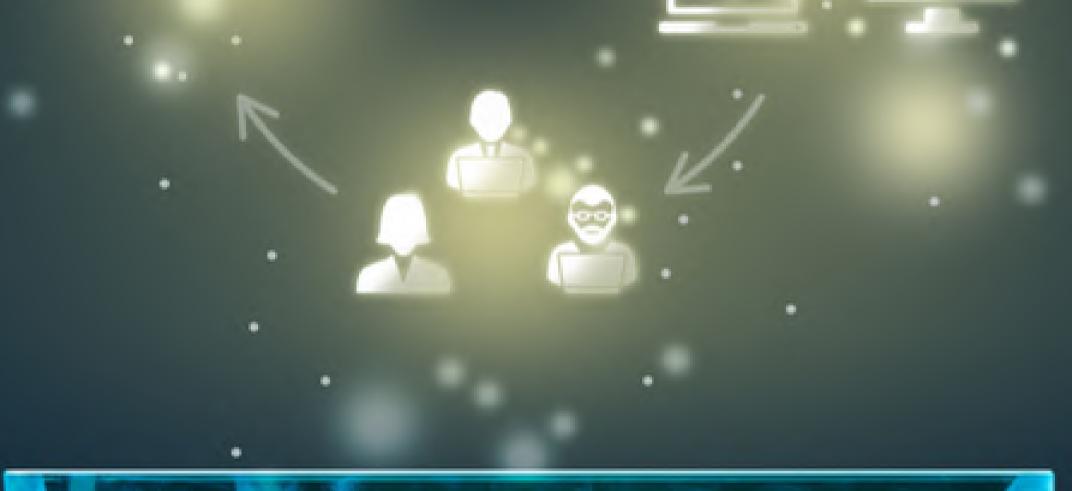
# Table of Contents

### 1. Introduction

### 2. Our Unique Solution

### 3. Investment Opportunity

#### <u>4. The Team</u>









### Shaping a Sustainable Tomorrow

The cement concrete industry <u>drives 8%</u> of CO2 emissions. Kruner Industries developed a binder that replaces cement and disrupts the status quo by converting local resources, such as desert sand, into sustainable construction materials.

We are slashing industry <u>CO2 emissions</u> <u>up to 90%</u>, innovatively steering towards a greener future.





With rapid urbanisation and modernisation, cement concrete has become the most consumed man-made material in the world today.

### The Challenge Sustainability & Availability



#### **Global warming**

Cement concrete production contributes **8% of CO2** emissions worldwide.



S

#### Shortage of construction sand

The scarcity of coarse-grained sand is **reaching critical levels**, which is a big challenge for the industry.



#### **Governmental pressure**

Increasing **regulations** push the cement concrete industry towards greener alternatives.

#### **Cement price is on the rise**

Rising cement prices strain budgets and **impact construction-project** feasibility.



# **Our Unique Solution Kruner Binder Technology**

- Our Kruner Binder replaces cement.
- Our Kruner Binder mixed with any sand grade, including desert sand, becomes concrete without cement
   – we call it KrunerRoc.
- Applicable across seven construction & building industries.





Our game-changing binder transforms construction materials, leveraging accessible resources like dune sand.

### The Advantages Kruner Binder Technology

UP TO 80% LESS ENERGY

Our binder drastically reduces energy consumption in **production**.

UP TO **90%** LESS CO2

By utilizing our game-changing binder, we **slash CO2 emissions** up to 90%.



Harm-free, mineral-based binder: **100% free** from cement, resin, slag and fly ash. Responsibly sourced and makes use of vast resources of untapped sand.





### **Minimum 60% less water** needed compared to concrete production.



More **profitable** than cement.

Committed to a greener future, we design our **cement-free** products to thrive within a **circular economy**.

### One Product Unlimited Possibilities

### Our Kruner Binder is applicable across 7 construction & building industries.

- Cement
- Precast
- Insulation
- Ready-mix concrete
- Stone Slab
- Brick
- Ceramics



#### **Kruner Binder**

# **Kruner Binder Application Fields**





#### **KrunerRoc** Cement-free, outperforms concrete

#### **KrunerInso** Safe, harm-free

KrunerStone Mouldable designer stone

**KrunerClay** Stronger clay, without kiln firing

# Investment Opportunity

#### 300 Mio. Euro Investment for up to 49% shares.

Establish a binder plant with 1 Mio. tonnes capacity in Saudi Arabia.

Plant set up: 12–24 months

ROI: 60-80%





Market potential for Kruner in Saudi Arabia in concrete, stone slabs, thermal insulation, brick & ceramic industry

### Market Potential Saudi Arabia

**Global Market Size** 

Saudi Arabian Market

Target Kruner Market Share (10%)





#### 1128 Billion \$

### **18.25 Billion \$**

### 1.83 Billion \$

### Revenue Streams

#### **Binder Sales**

### **CO2** Certificates



#### **Licence Fees**

### **Sales Channels Overview How We Sell the Binder**



mutual growth



#### Government

government projects, like NEOM, and partnering with nonorganizations, including the UN



#### **End Customer**

Buys product containing our innovative and sustainable binder technology "Kruner Inside"

### Major Global & Regional Potential Customers

#### **Kruner Industries**

#### Cement

- CNBM
- Cemex
- Henkelit
- Italcementi
- Taiwan Cement
- Holcim
- Yamama

#### Ready-Mix Concrete

- Lafarge Holcim
- Cemex
- Heidelberg Cement
- Votorantim Cimentos
- Anhui Conch Cement
- CRH
- Buzzi Unicem
- Yamama

#### Precast

- Oldcastle Infrastructure
- ELO Beton
- Spancrete
- Tindall Corporation
- Forterra
- CEMEX
- Holcim
- Gulf Precast



#### Ceramics

- China Ceramics
- Roca
- SCG Ceramics
- Mohawk Industrie
- Kohler
- Porcelanosa Grupo
- Villeroy & Boch
- Geberit



### STREET, LEE

#### Brick

- Wienerberger
- Boral
- Interbrick
- Brickworks
- Redland
- LafargeHolcim
- Acme Brick

#### Stone Slab

- CNBM
- Cemex
- Henkelit
- Votorantim
- CRH
- Holcim
- Yamama

### Past, Present & Future

#### 2018 - 2022

Technology adaptation and Industry application development for:

- Kruner Clay non-kilnfiring brick process developed
- Kruner Roc precast wall production successfully tested at the precast factory
- Kruner Inso material developed
- Kruner Stone Block adapted for mass production

#### 2023 - 2024

- Kruner Stone designer sink development finalised
- Kruner Binder patent pending
- Binder plant design finalised
- Funding in progress

#### 2012 - 2017

- R&D
- Binder prototype finalised



#### 2040

Own 450 plants

#### 2026 - 2029

- MENA 3x plants
- APAC 3x plants
- SOP in Poland
- SOP in USA

#### 2025

- SOP in Saudi Arabia
- SOP in Malaysia

### **Our Expert Core Team United in Vision**



#### Mag. Samuel Krupensky CEO & Co-Founder

- 17+ years experience in construction and real estate
- Vast experience in leading people
- Sales leader
- Serial entrepreneur



Helmut Lerner CTO & Co-Founder

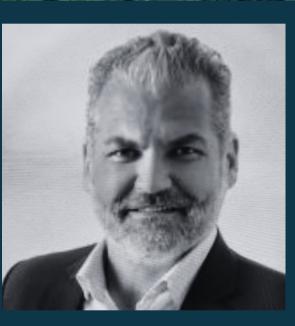
- 25+ years experience in process automation
- Specialist in aircraft and automotive engineering
- Head of R&D in liquid plastics



#### **Robert Rentz** COO & Quality Manager

- Composite-materials expert in development and electrical engineering
- 29+ years in mineralogy and chemistry





**Peter Wiesinger** Investor & Board Member

30+ years of expertise in architecture, development, and international leadership
Experience in city and infrastructure development in the Middle East





#### Ching Keh Chew Investor & Board Member

- 20+ years in advertising & communications
- Proven regional leadership
- High-profile clients: ABN AMRO, Microsoft, AIA, Singapore's Temasek Holdings, etc.

# Our Expert Advisory Team



#### **Peter Hammer**

- Vice President of special projects Battenfeld-Cincinnati
- Expert in extrusion production plant set-up
- Six Sigma certified



#### Dr. Christoph Piribauer

- Head of working group, raw materials and industrial minerals, FGK – Glas/Keramik Institute
- R&D Project Manager at RHI AG
- Montan University of Leoben graduate
- Specialises in raw material development



#### **DI Friedrich Willitsch**

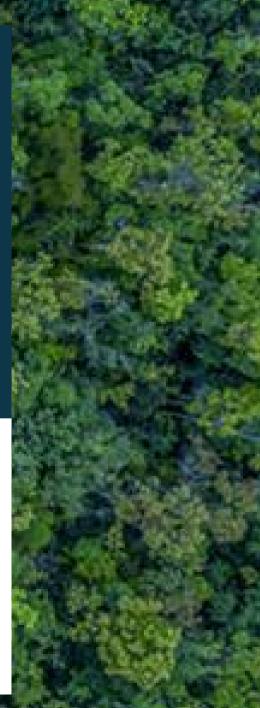
- 35+ years consulting experience in planning and building cement- and wasteprocessing plants
- Austrian Innovation Award recipient
- Expert in cyclone-based cement technology





#### Univ. Prof. Dr. Lengauer

- Director, Minerology Department, University of Vienna
- Published 143 articles in mineralogy



### Our **Partners**

At Kruner Industries, we foster innovation through strategic global partnerships with industry leaders, advanced R&D facilities, and esteemed universities.

These alliances, an integral part of our DNA, provide unique expertise and resources that drive our mission and accelerate innovation. Through these collaborations, we uphold our commitment to excellence and pioneering solutions.





TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY







### **Invest with us!**

#### Mag. Samuel Krupensky CEO & Co-Founder



**Phone** +43 680 23 131 23



**Mail** <u>Get in touch via Mail</u>



**LinkedIn** <u>Click here</u>



**Web** <u>krunerindustries.com</u>



Book a Meeting Click here



More Information Scan or click here

