### A Journey from Bioenergy Research to Concrete Technology Entrepreneurship

Jonne Hirvonen Carbonaide

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Jonne Hirvonen Chief Operating Officer, Co-founder

# **8%** Concrete's heavy burden on global GHG emissions

= 10 Bm<sup>3</sup> of concrete each year

We wanted to do something about it at VTT.

Carbonaide was born.



## Drop-in carbon-curing solution to existing precast concrete factories

Carbonation process modules

CO<sub>2</sub> tank

24

**Curing chambers** 



#### Not just storing of CO<sub>2</sub>

- 1. 20-50% less cement needed
- 2. Enabling new binders
- 3. Accelerating production speed
- 4. Making 2nd most used man-made material into permanent carbon-storage





Constantly increasing cement prices: solution well received by the conservative industry.



# Turning research into business

Tapio Vehmas: concrete Jonne Hirvonen: energy & CO<sub>2</sub>

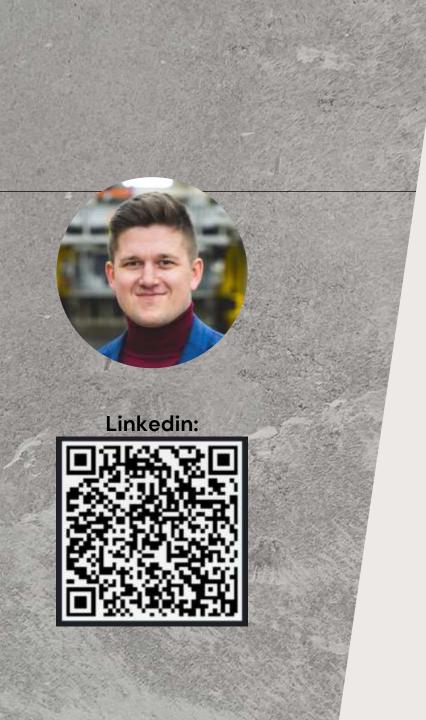
Founded in 2022, now team of seven with three clients soon onboarded in Finland.

Next to Europe and concrete elements.



<u>Be curious</u> on adapting your expertise on new topics - and good things will happen.

## Carbonaide





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