

Categories: Advanced Materials, Automation, Construction Tech, Modular Construction, Carbon Capture

Monthly net burn:
EUR 0

Capital seeking:
EUR 1.000.000

Country of origin: Croatia

Team:
Lucija Stepinac, Founder & CEO

Summary (Elevator pitch):

METASTRUCT develops 3D-printed TPMS systems using generative design to cut material use and enable passive heating and cooling.

Business model:

Revenue from product sales, custom design and engineering, and licensing of our proprietary design and structural technology.

Customer problem:

Buildings use too much material and energy, while structural, thermal, shading and passive heating/cooling functions remain fragmented.

Business logic:

Validated at TRL 4; next: full-scale pilot, certification and first sales, then scale through manufacturing partners and licensing.

Solution:

Generative design and topology optimisation shape TPMS geometries for optimal performance, using up to 70% less material.

Competitors:

Conventional curtain walls, precast concrete systems and standard 3D-printed walls with simple hollow geometries.

Product / Service:

3D-printed façade and wall systems designed through generative design and topology optimisation for high performance with less material.

Competitive advantages:

Up to 70% less material/CO₂, 50% faster delivery, lower costs, and major gains in energy performance, comfort and design freedom.

Customer:

Architects, developers, façade contractors and building owners seeking low-carbon, high-performance and distinctive building systems.

Sales strategy:

Direct B2B sales through pilot projects and architects, followed by certified product sales, manufacturing partnerships and licensing.

Market:

Global façade and building-envelope market, initially targeting high-value sustainable buildings and landmark projects across Europe.

Marketing strategy:

Flagship pilot projects, architecture and construction networks, industry events, strategic partners and international startup exposure.

What we need:

We are seeking strategic investors, pilot customers and industrial manufacturing partners to accelerate certification, first commercial pro...

Financial projections (EUR)	2026	2027	2028	2029	
Revenues (EUR)	200.000	300.000	800.000	2.000.000	
Expenses (EUR)	60.000	100.000	650.000	1.400.000	
Net (EUR)	140.000	200.000	150.000	600.000	