

# SmartCapture



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## Challenge

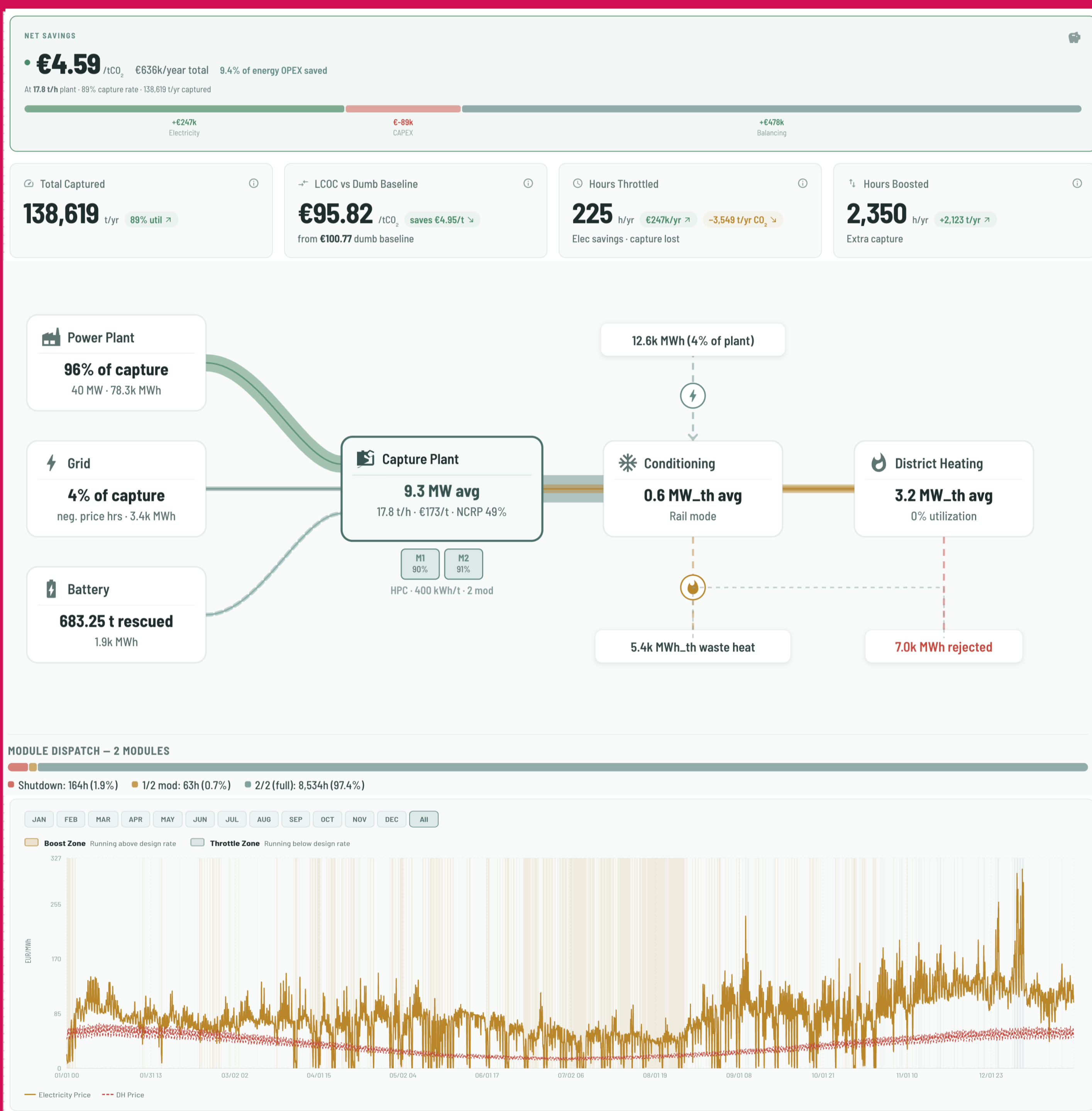
Carbon capture plants are large energy consumers planned and operated at fixed capture rate around the clock. This means they consume electricity at peak prices and do not participate in grid balancing markets. The consequently higher energy costs add to an already difficult business case.

## Project Description

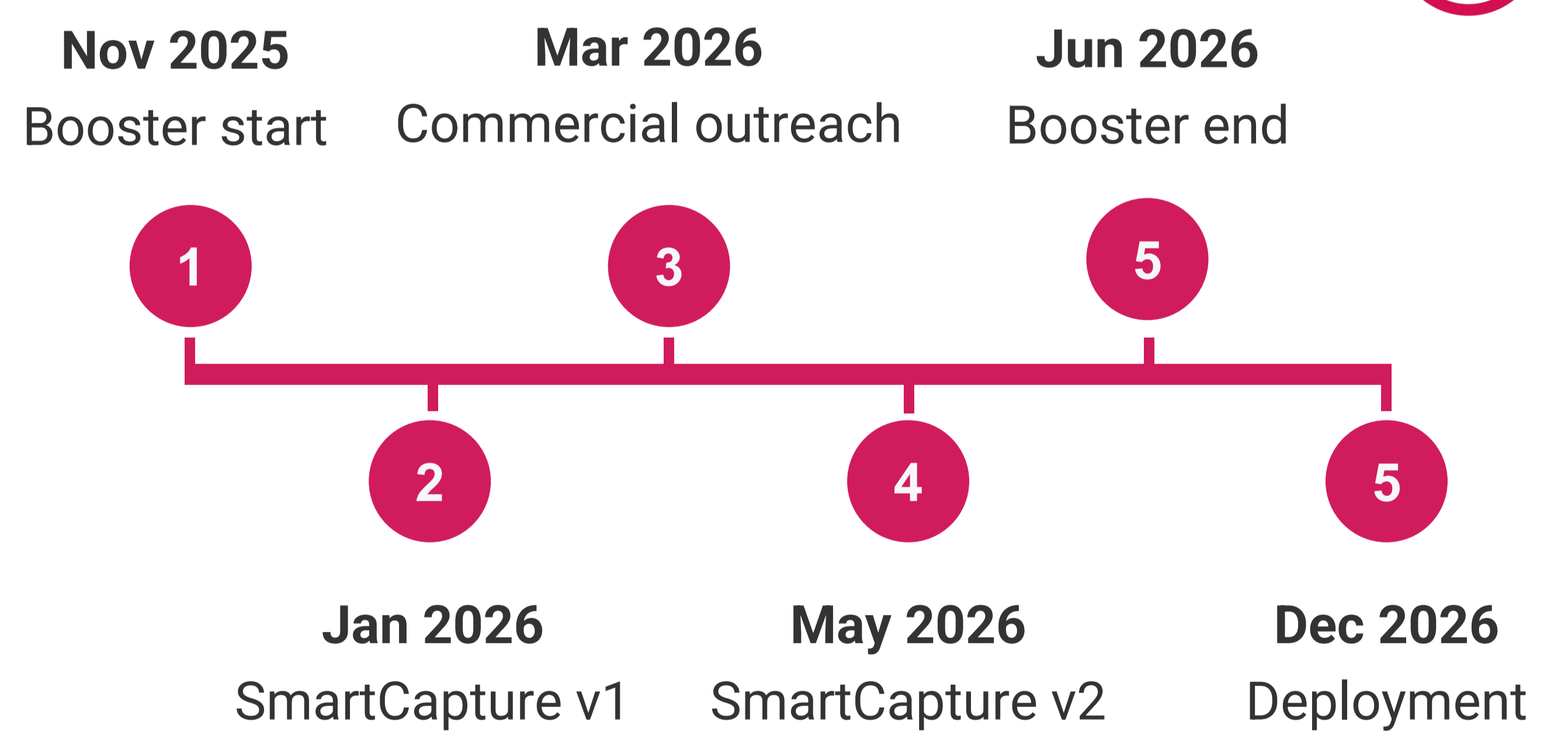
SmartCapture is an energy management and optimization platform. It tells operators when and how much CO<sub>2</sub> to capture, based on electricity spot prices, district heating demand, balancing market opportunities, and T&S contract structure, delivering annual capture volumes at 10-20% lower energy OPEX per ton of CO<sub>2</sub> captured.

The CDR Booster funding allowed us to take SmartCapture from an idea to a full platform, shaped directly by emitter feedback and validated against their real operational data. Initial idea of an electricity-side optimizer grew into a broader energy management platform, based on operator need to consider all possible flexibility levers.

This enabled us to strengthen our value proposition, develop a pipeline of interested parties and put us in a position where we can commercialize the platform and look for implementation partners.



## Project Timeline



## Next Steps

- 1 Onboard new partners and establish commercial agreements
- 2 Add energy elements to SmartCapture platform – heat storage, CO<sub>2</sub> stream variability, etc.
- 3 Expand to cover different capture technologies (Amine, HPC, Cryogenic)
- 4 Move from simulation to live operation at an emitter site

## We are looking for...

- Industrial emitters and capture pilots to deploy SmartCapture
- Funding to continue development
- Technical partners to expand to other technologies