

CMBlue Energy

Energy Storage

Inspired by Nature

Linz, 19 March 2024



Management Board



Dr. Peter Geigle

Founder & CEO

25 years of experience in biotech
Founder of the biotech company
'CellMed'
Multi entrepreneur with
successful exits



Dr. Nastaran Krawczyk

CTO

PhD in Physical Chemistry,
University of Giessen
With CMBlu since 2015



Gabriele Schallegger

CFO

Master Degree in Economics
20 years experience as CFO and
Managing Director
Various successful capital
markets transactions



Energy storage will be critical to the world's decarbonization goals, but...

...existing energy storage technologies won't be enough due to their reliance on increasingly expensive scarce material.



The Future of Energy Storage is Organic



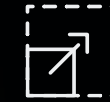
Safe

No Fire Risk
No Explosion Risk
No Toxic Fumes
Moderate pH



Sustainable

Environmentally Friendly⁽¹⁾
> 90% Sourcing and Value Creation Locally⁽²⁾
No Rare or Conflicted Materials
Fully Recyclable Components
Small Footprint



Scalable

Power and Capacity Independently Scalable
No Limitation in Size
Modular Design
Modular Production

Source: TÜV SÜD, CMBLu Energy, company presentations and publicly available information.

(1) CMBLu's batteries have a much smaller CO2 footprint in manufacturing than existing batteries and maximize the potential of renewable energies.

(2) CMBLu's batteries are designed in such a way that over 90% of materials required for the manufacturing process can be sourced locally; this fact applies to the finished product in 2025.

Company Profile and Overview

OWNERSHIP STRUCTURE

The company is privately owned by five very experienced shareholders.

The company has the structure to go public:

- Fully audited, IFRS, simple structure, no legal cases, qualifies as FPI
- Incorporated in 2014
- HQ: Alzenau, Frankfurt area, Germany
- CMBlu, Inc.: Petaluma, California
- Employees: 180+
- Equity: USD > 200m
- No debt



To be continued...

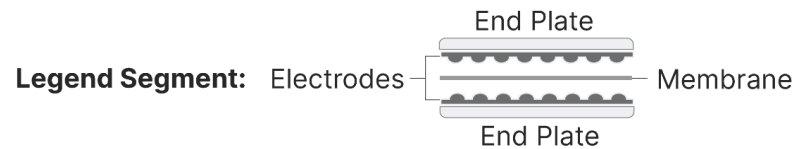
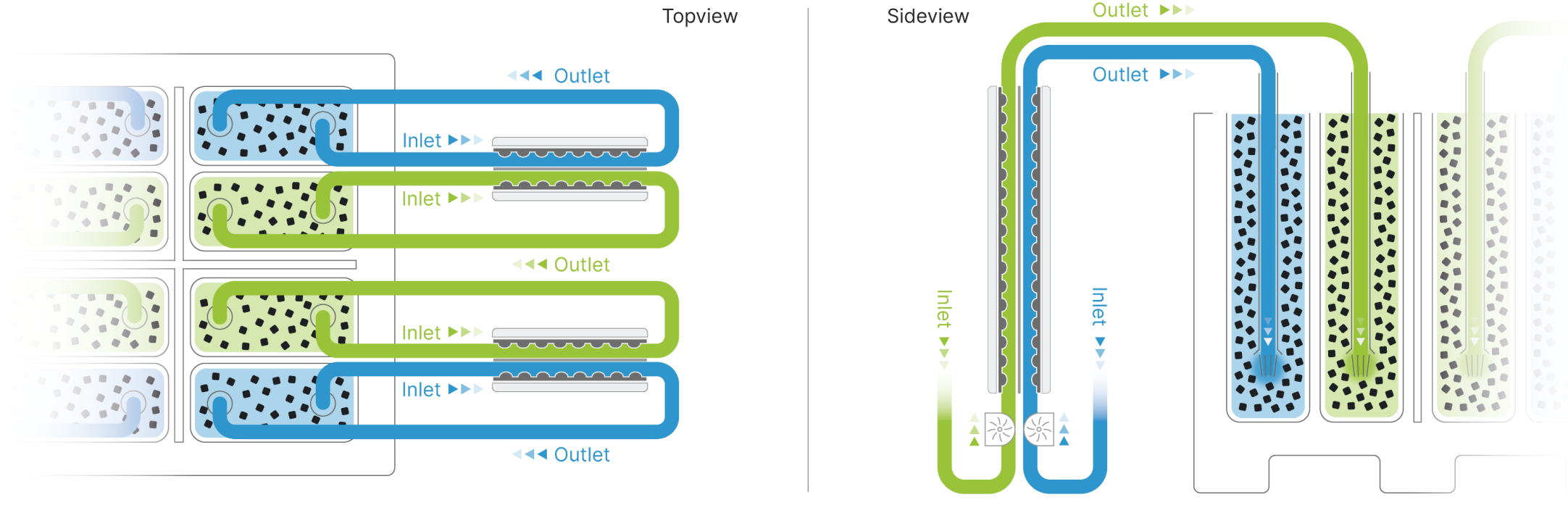
Development of the Technology

- We have started on a white sheet of paper
- CMBlu Energy runs one of the largest non-lithium battery labs worldwide with more than 100 scientists
- We continuously test 80+ batteries of all sizes in-house
- We have collected data from >1.5 million hours battery life in hundreds of thousands of cycles
- We have a state-of-the-art pilot production line since 12/2020
- We are audited according to ISO 9001 – ISO 14001 – ISO 45001



The Organic SolidFlow Battery

CMBlu's Revolutionary, Proprietary Technology



Innovative Carbon-Based Organic SolidFlow Battery Design

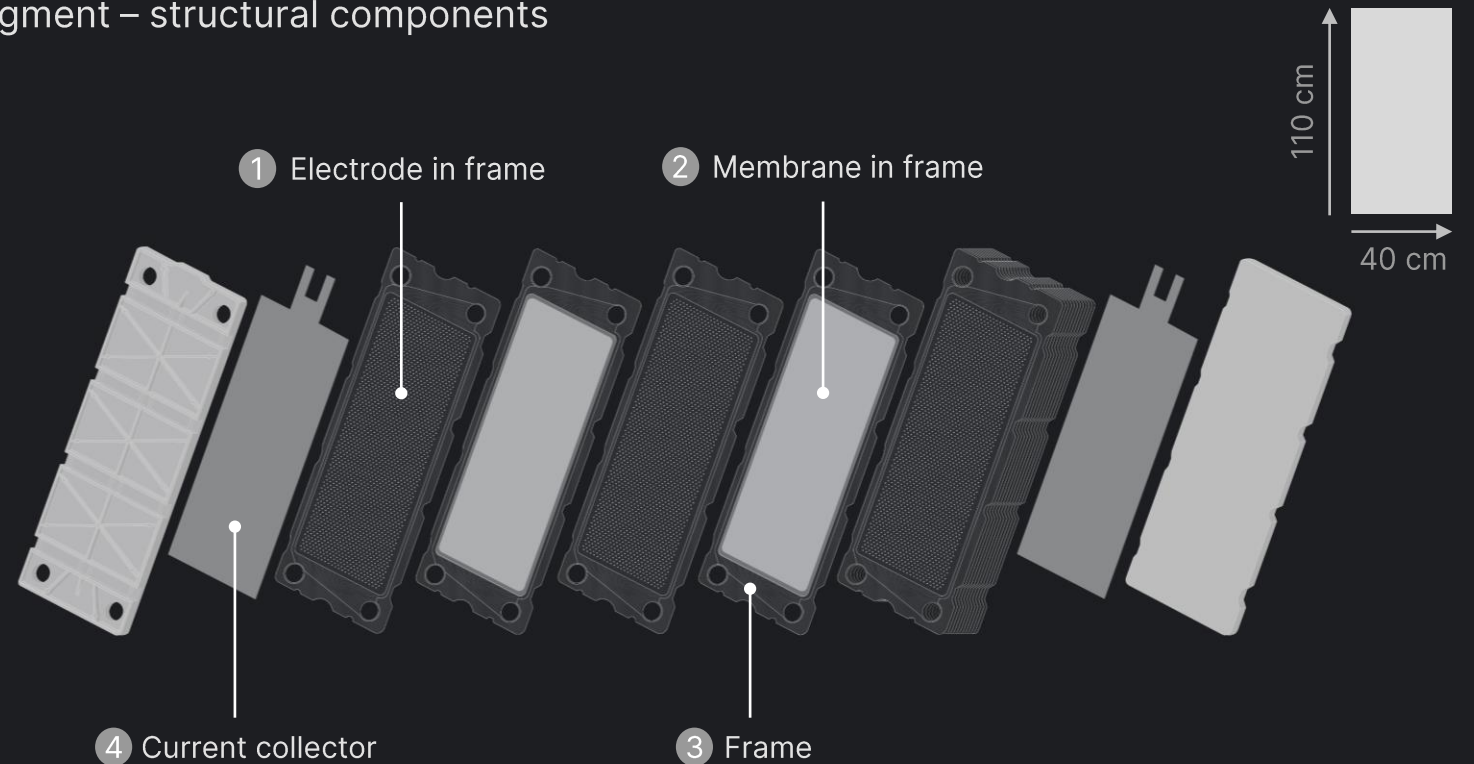
Designed to be modular and easy to source locally at best cost

A battery segment consists of serially connected half cells with the following components:

- 1 Electrodes (carbon-based)
- 2 Membranes (carbon-based)
- 3 Frames (polypropylene)
- 4 Current collector

- Simple & stable
- Cost-efficient material
- Recyclable
- Regional sourcing
- No rare or conflicted materials
- Longer service life due to welding

Segment – structural components



High Density Storage Using Organic Polymers

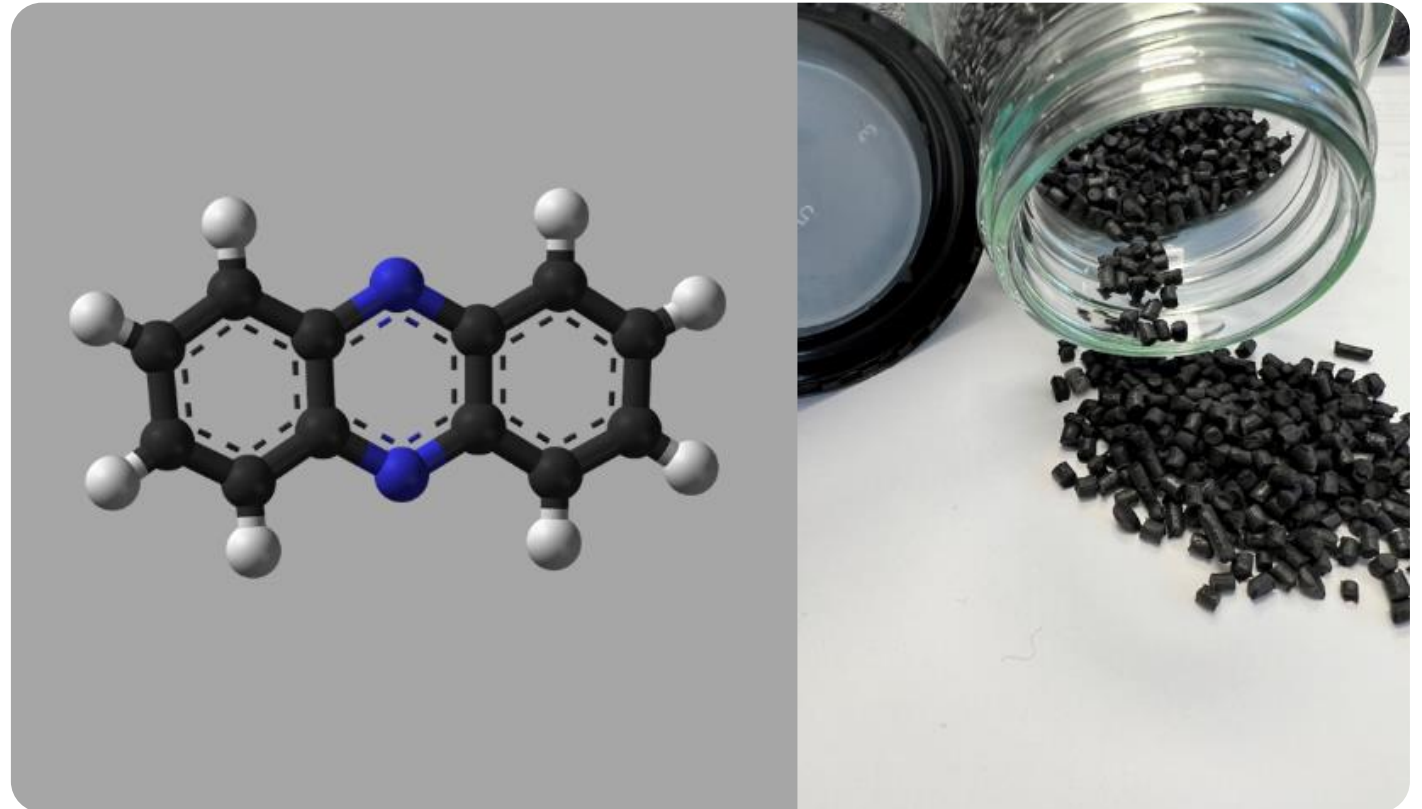
CMBlu Technology Combines “Solid State” and “Flow Battery” Technology

High-performance Flow System

- Aqueous system
- Safe, non-flammable
- Low concentration

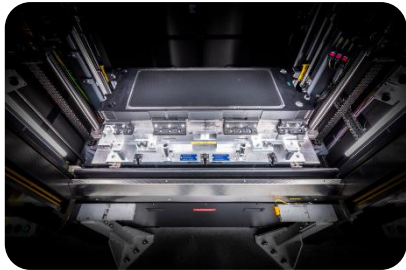
High-capacity Solid Storage System

- We use carbon-based polymers
- Very high capacity > 200 Wh/kg
- Up to 98% of the energy is stored in the solid
- Solid electrolyte is decoupled from the segment
- Powerful, stable, low-cost



Highly Scalable Manufacturing

CMBlu designed a highly efficient, scalable and automated automotive-like production process



Automated

Highly **automated, cost-efficient** production in **low labor-intensive** production cells



Scalable

“Copy Exact” production blueprint, enabling **the same** manufacturing dynamics and modular scalability



Efficient

Improving production process continuously leading to higher power output of next generation segments



Safe

Significantly **lower safety and environmental requirements** compared to lithium battery production



Independent

Supply chain security due to local sourcing of materials, **independence from rare or conflicted materials**

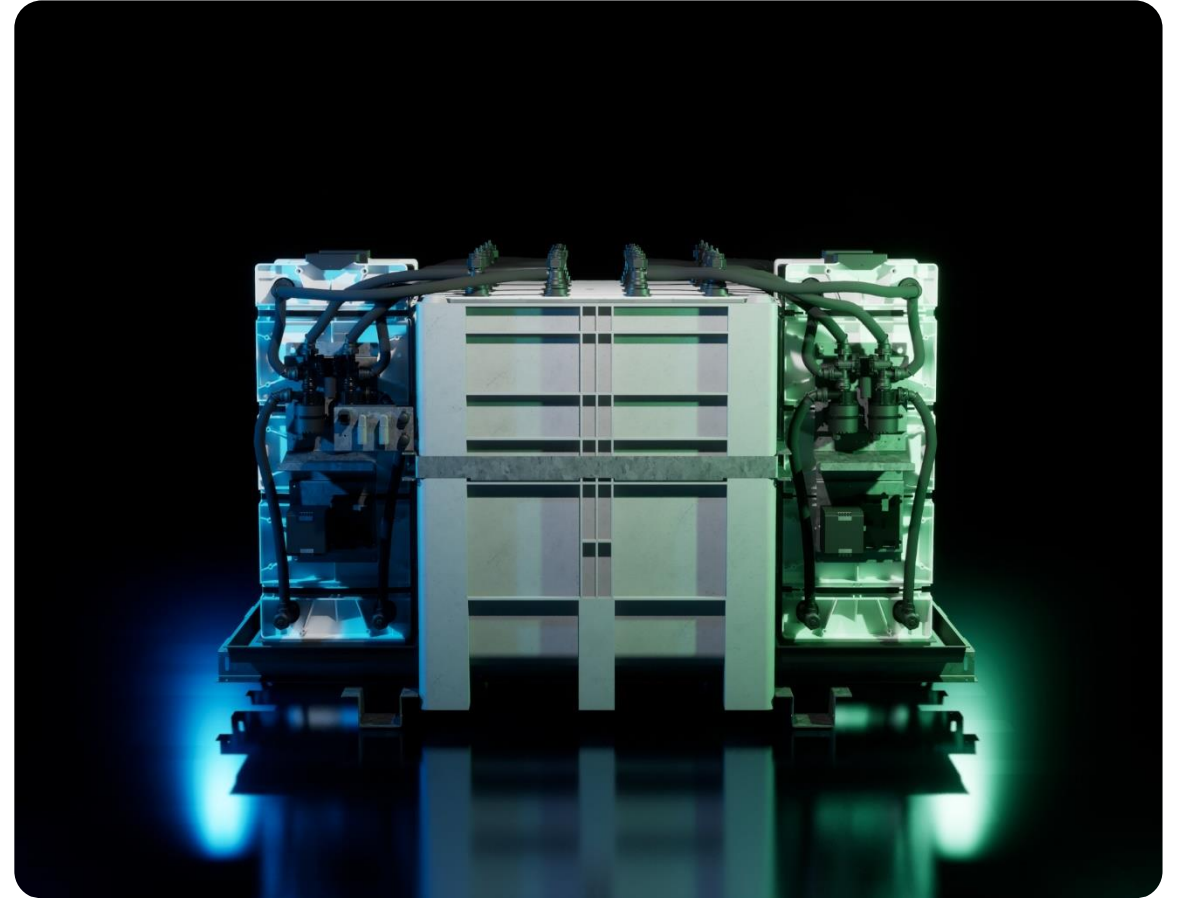
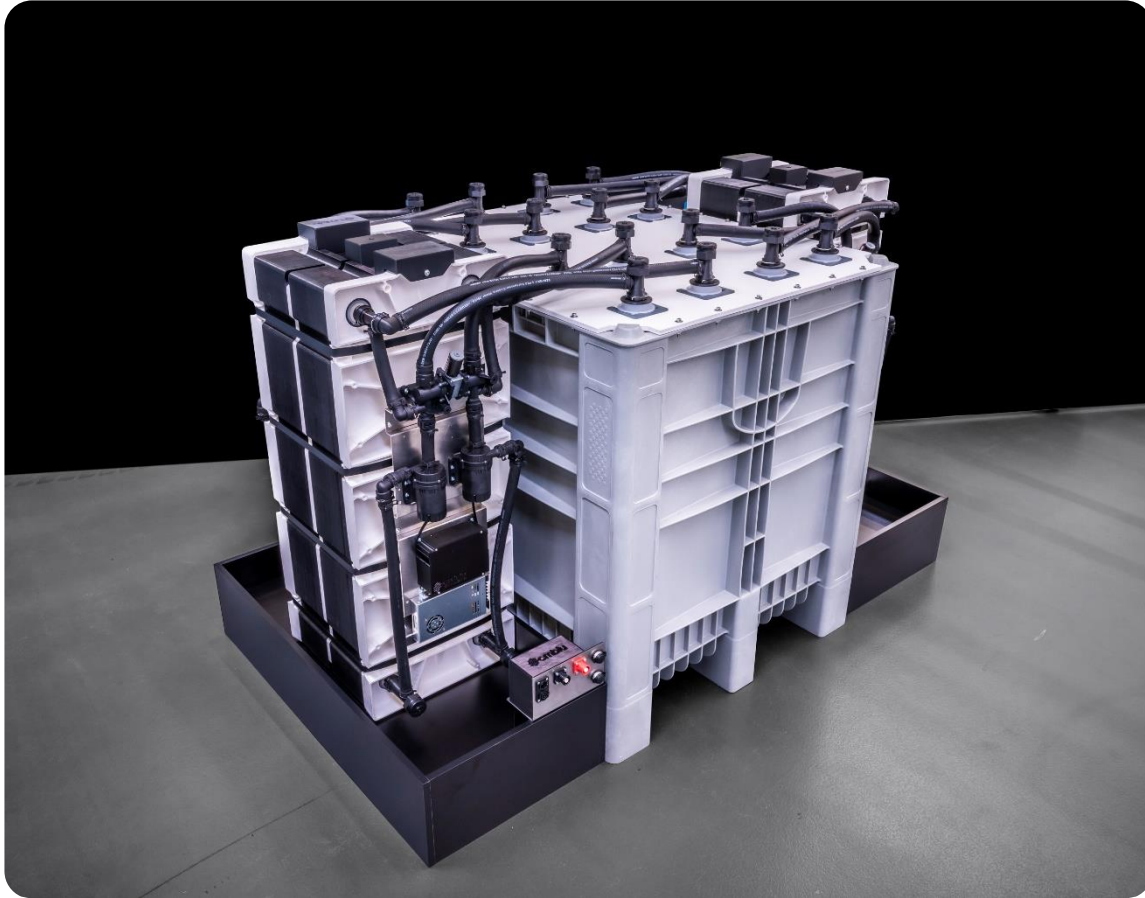
CMBlu Energy

Produktimpressionen

2024

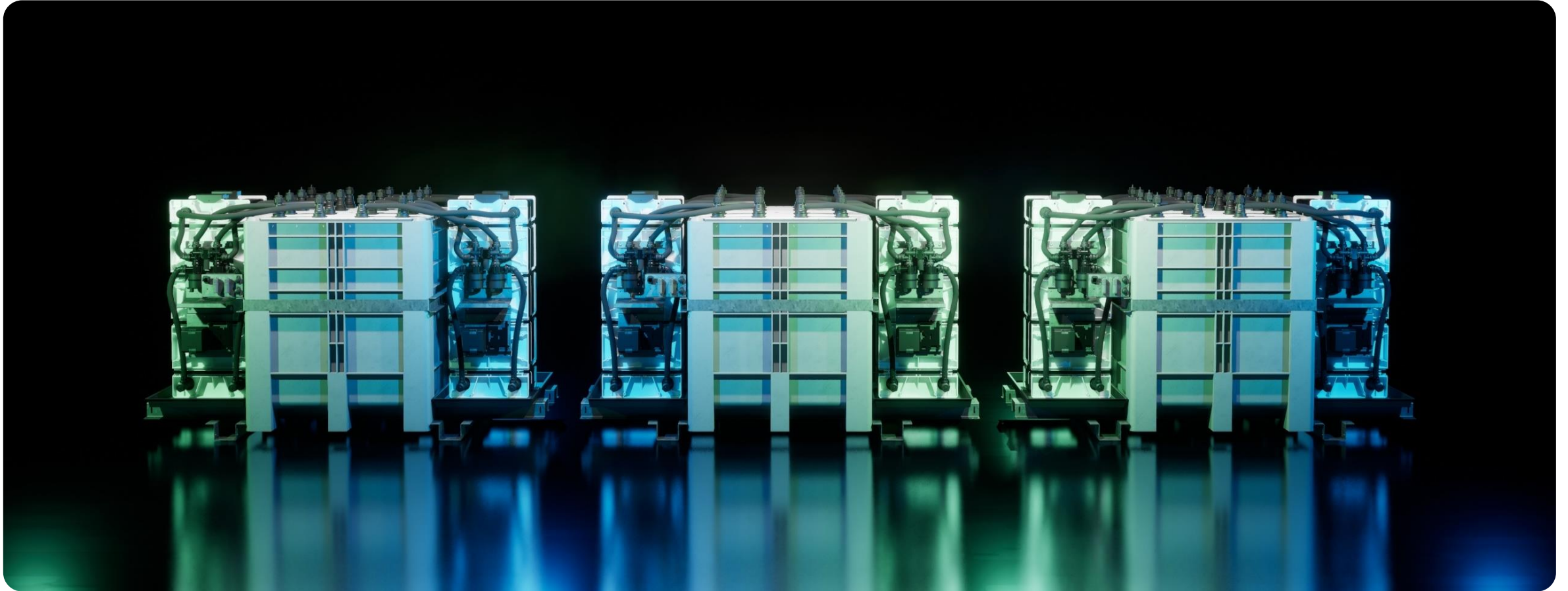
The Module

40 kW / 5 h storage / 200 kWh



The String

3 connected Modules: 120 kW / 600 kWh



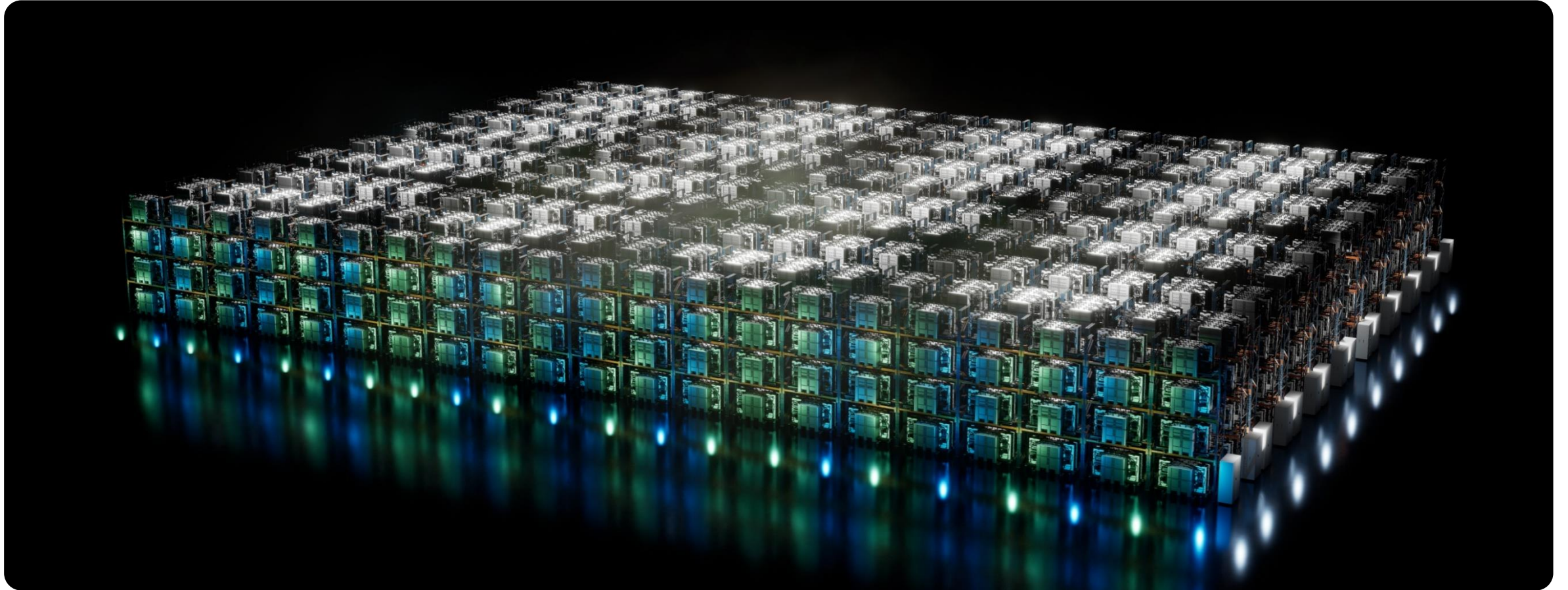
The Storage

4 Strings: 2,4 MWh



The Powerhouse

60 MW / 300 MWh



CMBlu Modularity



A warehouse for electricity

50 MW – 250 MWh

- Compact
- Safe
- Sustainable
- Ultra-redundant
- Intermediate storage of very large amounts of energy



Thank You