

CACTOS

A black, three-dimensional cube is shown against a light gray background. The front face of the cube features the word "CACTOS" in a bold, white, sans-serif font, centered horizontally. Below the text, there is a complex, symmetrical cutout pattern consisting of vertical slats arranged in a hexagonal, crystalline structure. The top surface of the cube is visible and has several small, dark circular marks, possibly screws or mounting points.

The Problem



Volatility

In terms of **volatility**, the electricity market is a commodity market like no other. **100-fold intraday price fluctuations** are not uncommon.

While extremely beneficial in the global scale, and necessary to mitigate climate change, **the shift to renewable energy production** increases electricity market price volatility. This is due to **temporal imbalances in supply and demand** – sometimes it's windy, sometimes not.

The imbalances also increase **frequency volatility**, increasing the need for grid stabilizing reserve products, such as frequency containment reserve (FCR).

The Solution



Cactus One in a nutshell

Cactus One is a **distributed energy storage system** based on smart energy storage units and the **Cactus Spine** cloud control system.

Cactus One provides clients with **automatic Load Shifting, Peak Shaving and Reserve Power functions**. Clients can choose a desired revenue sharing model for grid operations (FCR, FRR).

The system is available through a lease & operate model where Cactus **finances, builds, installs, commissions, operates and maintains the system** at a fixed monthly fee and **10-year warranty**.

Cactus One system description



Underlying technology

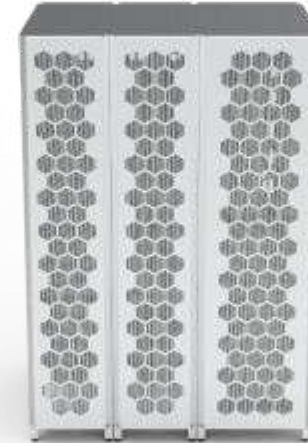
1.

Cactus builds the smart energy storage units utilizing either recycled (Tesla) or new (LFP) batteries, and the **Cactus Battery Management System (BMS)** and **Energy Management System (EMS)**.



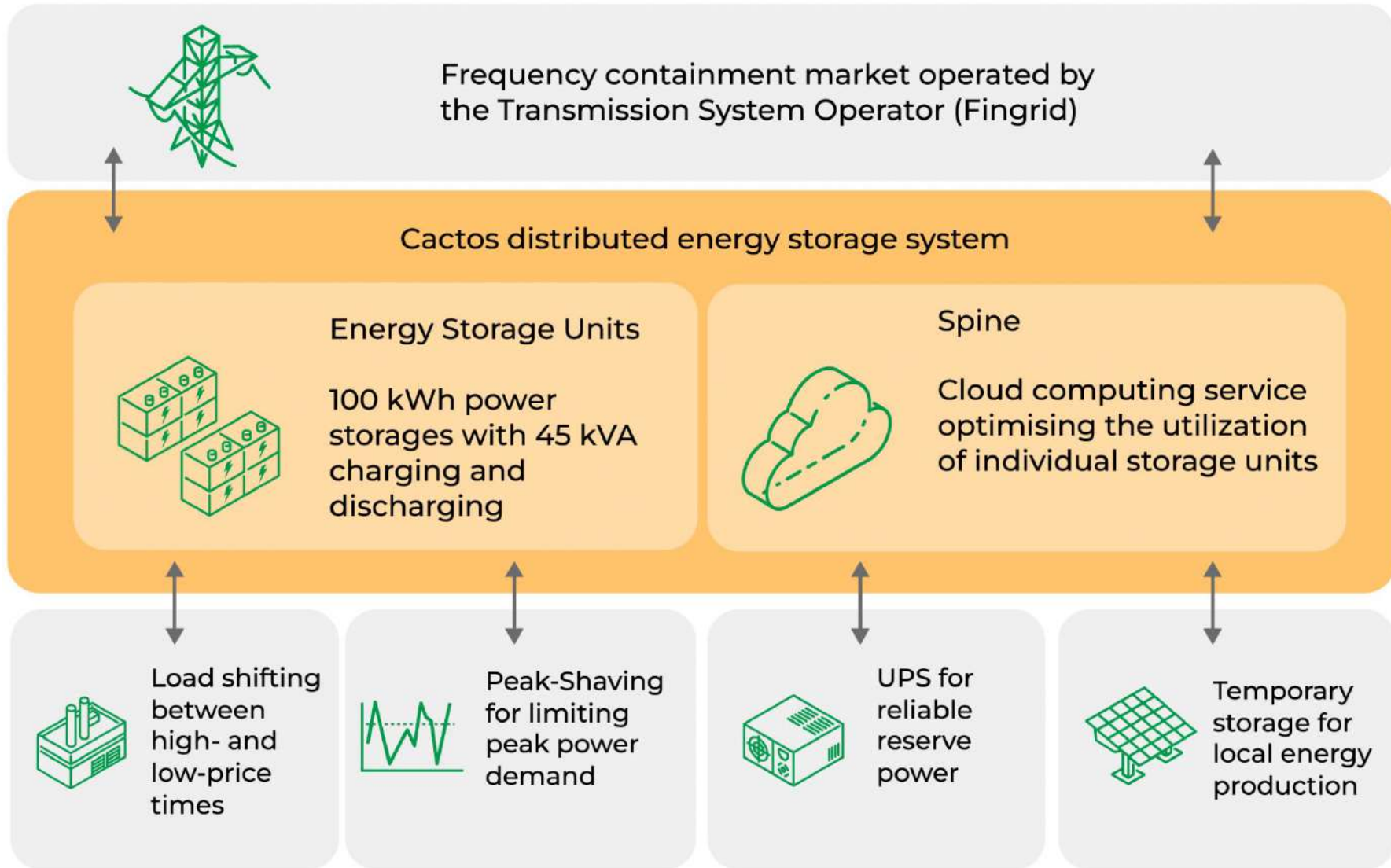
2.

Cactus **proprietary cloud computing software, Cactus Spine** utilizes algorithms and data from various sources, optimizing the use of each individual battery storage, given local asset-specific conditions.

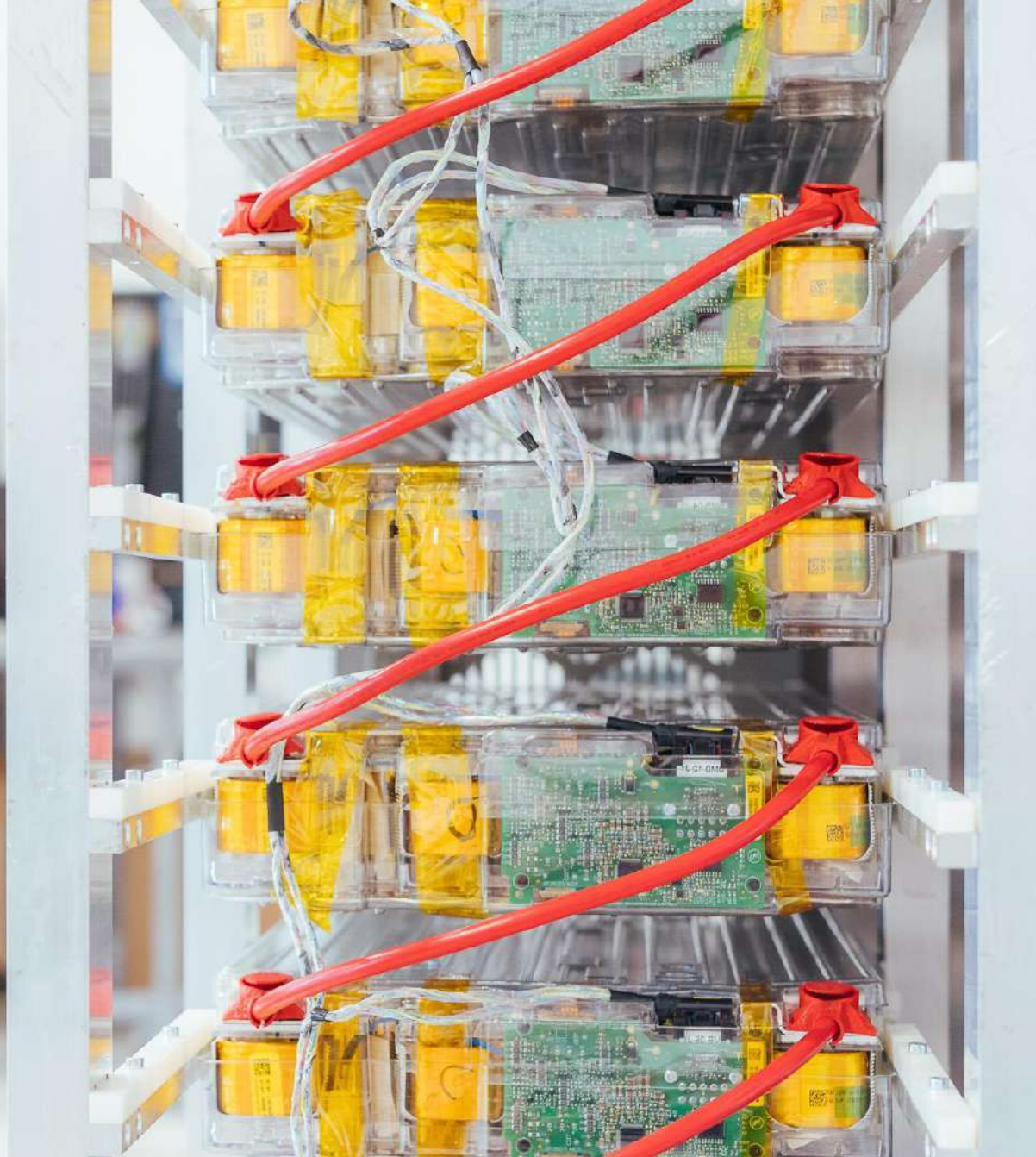


Cactus Spine prepares the operating parameters for the embedded control system, Cactus EMS, which executes the desired functions at the right time. Cactus EMS provides real-time reporting to Cactus Spine, which users can view through the Dashboard.

How it works?



Customers



Cactus customer segments

Industrial & Commercial



Retail



Agriculture



Residential



Hospitality/Medical



EV charging hubs



Logistics Centres



Government buildings



About the clients:

We are proud of our diverse client base, with Cactus One users ranging from large industrial enterprises, to small local business owners as well as government entities.

CACTOS

