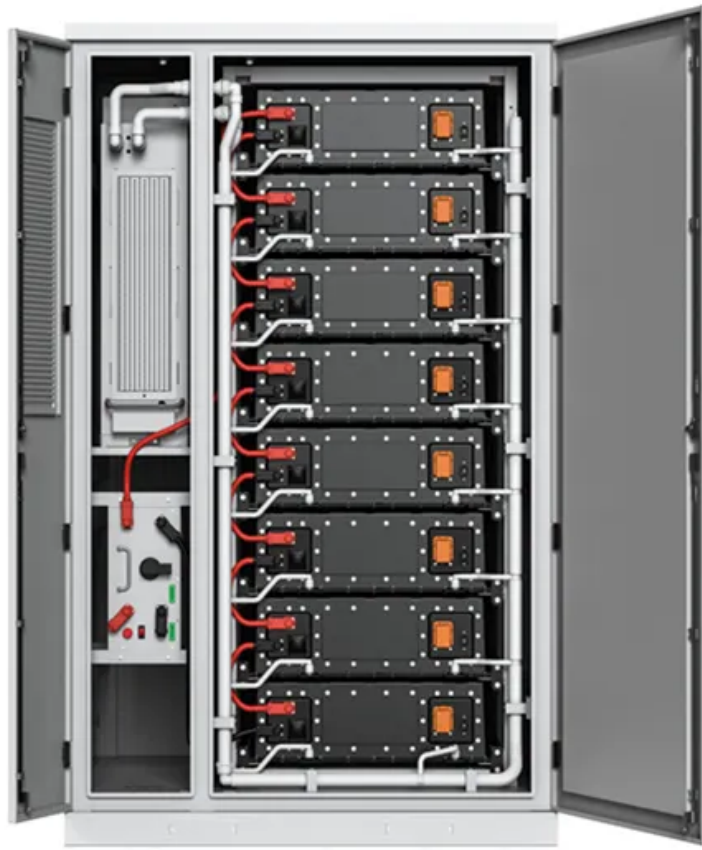


## Solar Energy South Africa

# Kraftblock energy storage Hungary



## Kraftblock energy storage Hungary

---



### **Kraftblock raises 20 million euro for thermal energy storage ...**

Through its patented and sustainable thermal storage technology, Kraftblock enables the energy transition and decarbonization of processes in the energy and industrial sectors. The storage time-shifts waste heat or renewable power to replace fossil fuels with green heat up to over 1,300°C.

### **Kraftblock: Renewable Energy Storage System**

Kraftblock is a storage system for renewable energy. It works on the principle of storing electricity and heat in a specifically designed storage unit, that can be later used again in the industry. Martin and Susanne's Kraftblock is not just a creative and unique product, but also a very useful tool in the fight of stopping climate change and



### [FAQ about Thermal Energy Storage](#)

After charging, Kraftblock can store heat for your application from several hours up to one week. If you need to store energy between ten days up to two weeks, a sophisticated insulation concept will be applied. The energy loss per day also depends on the insulation: with a basic insulation the loss is between 1.5 and 3.0 percent per day.

## [Kraftblock , Large-scale heat storage](#)

Thermal energy storage. Large-scale, sustainable, and cost-efficient. Kraftblock is a highly efficient heat storage system that can buffer thermal energy at very high temperatures, designed to decarbonize power generation and industrial processes. >>> To the website All over the world, an extraordinary amount of energy is wasted in the form of heat, especially in high ...



## **Kraftblock**

After an intensive research phase, the Kraftblock team led by the head engineer Dr. Martin Schichtel and economist Susanne König, developed a solution for this. Imagine capturing the massive excess energy created by manufacturing plants, solar panels, wind turbines and storing it in a storage based sustainable energy system.

## [Projekte & Kunden , Kraftblock](#)

The copper industry needs to decarbonize its energy. Kraftblock is able to reutilize waste heat and partially electrify the processes in a smart way. Kraftblock has a new partnership with leading polish energy transformation company Enervigo to deploy thermal energy storage solutions in utilities and industries.



## [Net-zero process heat , Kraftblock](#)

Reduce your costs with Kraftblock Source. The Net-Zero Heat System allows you to benefit economically by reducing your costs. Not only is the CAPEX of the Kraftblock thermal energy storage low in comparison to other storages.



Because of the ability to shift energy, the Kraftblock system charges from the grid when prices are low or even negative.

## KRAFTBLOCK

KRAFTBLOCK , 8370 seguidores en LinkedIn.  
 Kraftblock - rethinking energy-storage. ,  
 KRAFTBLOCK is an energy storage system that is able to decarbonize industries like steel, glass or ceramics, food, chemicals or paper. It will even help renewables to have their break-through in industrial heating. The modular and easily scalable system is based on a newly developed ...



## Generate Power

Rethink power generation with Kraftblock Source. Power generation in existing plants can be decarbonized and optimized regarding thermal processes with the Kraftblock storage system. In case of steam turbines, the stored heat is used for high-pressure steam generation or to keep the assets warm in order to prevent an energy intensive cold start.

## Presse & Medien

Kraftblock raises EUR20 million for thermal energy storage technology. Kraftblock hat einen Hochtemperaturspeicher entwickelt, bei dem sich fluktuierender Überschussstrom aus Windkraft- und Photovoltaik-Anlagen kostengünstig für Hochtemperaturprozesse bis

zu 1.300 Grad Celsius in der Industrie nutzen lässt. Ein gelungenes Beispiel



## Kraftblock , Grüne Wärme für die Industrie

Kraftblock wins German Energy Efficiency Award. Kraftblock, PepsiCo and Eneco win the German Energy Efficiency Award from dena. Kraftblocks Mission ist die Wärmewende in der Industrie. Die globale Klimakrise schreitet schnell und verheerend voran. Der größte Hebel zur Verlangsamung der Erderwärmung ist die Dekarbonisierung des Energiesystems.

## Cooperant , Kraftblock

Temperatures of up to 1000°C will be possible with the new receiver. The new thermal energy storage (TES) is where Kraftblock comes in: A demonstrator will be built at Kraftblock and installed at a CSP plant of partner CIEMAT in Almería, Spain, filled with a new version of the Kraftblock material mixed with a phase-change material.



## Projects & Customers

Recovering and reusing waste heat in the ceramic industry with Kraftblock. Buhck. Waste Heat Utilization. Energy Supplier. Moving Waste Heat over the Streets. Hall-A. Steel Industry. Our expertise on energy storage for you. Hear about it first on Kraftblock's Newsletter. [Checkbox](#). I

agree to receive the newsletter and accept the privacy



## Energy Solutions for Glass & Ceramics , Kraftblock

Kraftblock improves energy efficiency in the glass and ceramics industry. There is a lot of untapped potential from waste heat in the glass and ceramics industry. Production currently runs mostly on gas and is affected largely by strong price fluctuations.



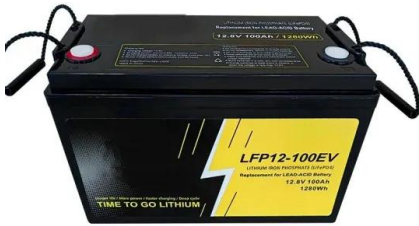
## KRAFTBLOCK

KRAFTBLOCK is a universal storage system where both heat and electricity can be stored and extracted Electricity can be converted into heat (PtH) and back from heat to electricity (HtP) Total efficiency is up to 60% (Electricity -> Electricity) and 92% (Electricity -> Electricity + Heat)

## Utilities enlist thermal energy storage firms Brenmiller, ...

The two-module system will replace an existing gas-fired boiler to and will have a thermal energy storage capacity of 70 MWh, making it the biggest commercial high-temperature energy storage project in the world, ...





## [FAQ about Thermal Energy Storage](#)

Kraftblock Systeme sind für die Industrie ausgelegt. Derzeit ist noch keine Anlage für Haushalte entwickelt. Wenn Sie Ihre industriellen Energieprozesse dekarbonisieren wollen, braucht Kraftblock eine Quelle, von der Hitze oder Strom kommt und eine Senke, für die die Energie bestimmt ist. Wenn Sie Abwärme von 350°C oder höher und/oder

## Contact

You got a question about our thermal energy storage system, for example about the largest high-temperature storage in the world? Let us know. Solutions. Overview. Discover our systems. We help you answer all your questions about Kraftblock's systems. Send us an email for general inquiries or tell us about your project. Start project



## Blog

The copper industry needs to decarbonize its energy. Kraftblock is able to reutilize waste heat and partially electrify the processes in a smart way. German Vice Chancellor Habeck visits Kraftblock. Our expertise on energy storage for you. Hear about it first on Kraftblock's Newsletter.  I agree to receive the newsletter and

## [Fight Climate Change in your Career](#)

Our goal at Kraftblock is to combat one of humanity's greatest challenges, the climate crisis. We work on stopping climate change and

keep the planet livable. Energy storage is at the heart of the energy transition: It is designed to end dependence on fossil fuels and drive the shift to renewable energy worldwide. This is the challenge and



## Kraftblock: Decarbonizing heat in industries

Kraftblock develops and builds systems to decarbonize heat in industries, district heating and the energy sector. The core technology is a multi-purpose, high-temperature energy storage that stores heat up to 1,300°C (2,400°F) in upcycled material. The systems either recycle waste heat or generate green heat via green power.

## Kraftblock wins German Energy Efficiency Award.

"Kraftblock is proud to work with such partners and thanks them for their support. They are leading the way where few have started," concludes Schichtel. Dena, the German Energy Agency, is a company owned by the German government, which was founded to design, analyze and implement energy system transformation and climate protection. ? ?



## [Press & Media](#)

Energy Storage: Dutch clean energy conglomerate Koolen Industries has invested EUR3 million in Saarbrücken-based Energy Storage / NanoTech Startup Kraftblock Dutch



clean energy conglomerate Koolen Industries has invested EUR3 million in Kraftblock, a German firm that uses nanotechnology to develop new ways to store and transport energy as heat.

## KRAFTBLOCK -ENERGY STORAGE

CASE I: RENEWABLES 5 1. RENEWABLE ENERGIES TRANSITION TO RENEWABLE ENERGIES AND LOAD MANAGEMENT  
 KRAFTBLOCK decouples energy production from energy consumption Volatile production: excess- or lack of energy production from fluctuating renewable energies-> in 2017 over 77 TWh could have been stored in Germany ...



## **KRAFTBLOCK, GREEN ENERGY FOR THE INDUSTRY**

Kraftblock replaces a 25MW gas boiler with a 22MW Net-Zero Heat System. Included is the world's largest commercial high-temperature energy storage with about 150MWh storage capacity. The system charges electricity ...

## **CSP plants**

Use a high-temperature thermal energy storage in your new CSP plant to store heat up to 1,300°C for later use. Solutions. Overview. Discover our systems. Net-Zero Heat. Heat from the receiver tower is fed into the Kraftblock storage via air on high temperature. 02. Storage. The heat is stored between hours and two weeks. 03.



## Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.ian-solar.co.za>