

# KSTAR Case Study

**KSTAR C&I ESS Cases  
BluePulse Series**

# KSTAR C&I ESS Installation Worldwide

## EU

 **3,000+**  
units installed

 **180+ MW**

 **283+ tons**  
CO<sub>2</sub> saved

## Global

 **5,000+**  
units installed

 **300+ MW**

 **471+ tons**  
CO<sub>2</sub> saved



# BluePulse Series

## Safe & Reliable

CATL LFP Battery Cell  
Double Fire Suppression System Design  
1+1 Redundancy Design

## Simple & User-friendly

Pre-installed in Factory for Easy Installation on site  
Integrated BMS/EMS, Suitable for Various Applications  
Effortless Operation, Cloud Control

## Economical & Efficient

Save CapEx, Expanding as Required  
Efficient and Energy-saving HVAC Design





## Project Cases - Self Consumption

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**Location:**

**Oman**

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**Capacity:**

375kW / 591kWh

3 units of KAC125DP2-BC197DE2

In addition to PV, system is utilizing external diesel generator to charge the batteries and feed the loads when needed



## Project Cases - Self Consumption

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**Location:**

**Social Center, Arões, Oporto, Portugal**

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**Capacity:**

50kW / 100kWh

KAC50DP-BC107DE2 + STS100



## Project Cases - Self Consumption

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**Location:**

**VIVISOL - Home care provider, Barcelona, Spain**

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**Capacity:**

100kW / 200kWh

2\*KAC50DP2-BC107DE2

## Project Cases - Self Consumption

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**Location:**

**Waste-to-energy company, Salamanca, Spain**

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**Capacity:**

70kW / 100kWh

BluE-20KT + KAC50DP2-BC107DE2





## Project Cases - Self Consumption

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**Location:**

**GLS - Logistic company, Valencia, Spain**

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**Capacity:**

50kW / 100kWh

KAC50DP-BC107DE2 + STS100

## Project Cases - Self Consumption

**Location:**

**Producer of cold cuts and meat, Ruse, Bulgaria**

**Capacity:**

376kW / 699kWh

3 units of KAC125DH-BC233DE



## Project Cases - Time of Use

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**Location:**

**Bakery, Kamiensk, Poland**

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**Capacity:**

4 units of KAC125DP2-BC233DE2





## Project Cases - Self Consumption

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**Location:**

**Ceska Vejce, Czech Republic**

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**Capacity:**

600kW / 591kWh

3 units of 2\*KAC50DP-BC197DE



## Project Cases - Self Consumption

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### Location:

Druko Sřiřizov, Czech Republic

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### Capacity:

900kW / 591kWh

3 units of 2\*KAC50DP-BC197DE



## Project Cases - Self Consumption

Location:

**Case Zlata Krava, Czech Republic**

Capacity:

50kW / 107kWh

KAC50DP2-BC107DE





## Project Cases - Dynamic Control

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**Location:**

**Squadron Breda, Netherlands**

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**Capacity:**

50kW / 107kWh

KAC50DP2-BC107DE

## Project Cases - Dynamic Control

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**Location:**

**TMO Hulsel, Netherlands**

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**Capacity:**

50kW / 107kWh

KAC50DP2-BC107DE





## Project Cases - Dynamic Control

**Location:**  
**Minitopia, Netherlands**

**Capacity:**  
50kW / 107kWh  
KAC50DP2-BC107DE





## Project Cases - Dynamic Control

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**Location:**

**Poland**

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**Capacity:**

50kW / 197kWh

KAC50DP2-BC197DE2

## Project Cases - Time of Use

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**Location:**  
**Warehouse, Poland**

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**Capacity:**  
50kW / 107kWh  
KAC50DP2-BC107DE2





## Project Cases - Time of Use

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**Location:**

**Construction materials factory, Poland**

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**Capacity:**

50kW / 100kWh

KAC50DP-BC100DE



## Project Cases - Self Consumption

**Location:**  
Fire station, Poland

**Capacity:**  
50kW / 197kWh  
KAC50DP2-BC197DE





## Project Cases - Self Consumption

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**Location:**  
**Poland**

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**Capacity:**  
50kW / 197kWh  
KAC50DP2-BC197DE





## Project Cases - Self Consumption

---

**Location:**  
**Poland**

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**Capacity:**  
50kW / 100kWh  
KAC50DP-BC100DE





## Project Cases - Self Consumption

---

**Location:**  
**Poland**

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**Capacity:**  
50kW / 100kWh  
KAC50DP-BC100DE  
STS100D



## Project Cases - Dynamic Control

**Location:**  
**VONDOM-Local furniture manufacturer,**  
**Beneixida, Spain**

**Capacity:**  
200kW / 800kWh  
KAC50DP-BC100DE  
STS250

## Project Cases - Self Consumption

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**Location:**  
**Spain**

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**Capacity:**  
2.125 MW / 1.97MWh  
10 units of 2\*KAC50DP-BC197DE  
11 units of G125KT7





## Project Cases - Time of Use

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**Location:**

**Spain**

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**Capacity:**

100kW / 197kWh

2\*KAC50DP-BC197DE

## Project Cases - Dynamic Control (VPP)

**Location:**  
**Murska Sobota, Slovenia**

**Capacity:**  
1MW / 2MWh  
10 units of 2\*KAC50DP-BC197DE

No connected loads but installed as part of the local VPP project  
Discharge to the grid at the evening to ease the energy peak



## Project Cases - Self Consumption

### Location:

Agricultural land, Starnberg, Germany

### Capacity:

100kW / 197kWh

2 units of KAC50DP-BC197DE

AC-coupled energy storage system integrated into the customer's existing PV system, monitored by a third-party EMS platform



## Project Cases - Self Consumption

### Location:

**Agricultural land, Starnberg, Germany**

### Capacity:

100kW / 197kWh

2 units of KAC50DP-BC197DE

Covering the daily power demand of agricultural machinery and equipment, as well as supplying electricity to nearby livestock feed supermarkets and related facilities.





## Project Cases - Self Consumption

**Location:**  
Pharmaceutical company, Walldorf, Germany

**Capacity:**  
100kW / 107kWh  
G50KT + KAC50DP-BC107DE2  
AC-coupled energy storage system integrated into the customer's existing PV system, monitored by a third-party EMS platform



## Project Cases - Self Consumption

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**Location:**

**Restaurant, Bamberg, Germany**

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**Capacity:**

50kW / 100kWh

KAC50DP-BC100DE

## Project Cases - Peak Shaving

**Location:**  
**Meat Processing Factory, Guijuelo, Spain**

**Capacity:**  
600kW, 1.2MWh  
12 units of KAC50DP-BC100DE



## Project Cases - Dynamic Control

**Location:**  
**Communicatieweg 29 Mijdrecht, Netherlands**

**Capacity:**  
100kW / 200kWh  
2\*KAC50-BC100DE  
Third party EMS with manual control





## Project Cases - Peak Shaving

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**Location:**

**Prebold, Slovenia**

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**Capacity:**

150kW, 600kWh

## Project Cases - Self Consumption

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**Location:**  
**Madignano, Italy**

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**Capacity:**  
400kW / 788kWh  
4 units of 2\*KAC50DP-BC197DE



## Project Cases - Time of Use

**Location:**  
**Fish Farm, Zhmerynka, Ukraine**

**Capacity:**  
200kW / 394kWh  
2 units of 2\*KAC50DP-BC197DE





## Project Cases - Time of Use

**Location:**

**Nova Polom, Czech Republic**

**Capacity:**

100kW, 200kWh

## Project Cases - Self Consumption

**Location:**

**Cluj Napoca, Romania**

**Capacity:**

1MWh

5 units of 2\*KAC50DP-BC197DE



## Project Cases - Dynamic Control

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**Location:**

**Mohács, Hungary**

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**Capacity:**

100kW / 200kWh

2 Units of KAC50DP-BC100DE + EMS01D

AC-coupled

Stable power supply for health facility





## Project Cases - Dynamic Control

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**Location:**  
**North Macedonia**

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**Capacity:**  
700kW / 1.4MWh  
14 Units of KAC50DP-BC100DE with 1 EMS01D



## Project Cases - Energy Independence (off-grid)

**Location:**  
**Khmelnyskyi district, Vinkovci, Ukraine**

**Capacity:**  
100kW / 394kWh  
2\*KAC50DP-BC197DE + STS100D  
Expanded from 197kWh to 394kWh for full off-grid capability  
Scalable design allowed for post-installation capacity doubling  
100% grid independence for milk farm operations





## Project Cases - Self Consumption & Peak Shaving

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**Location:**

**Hansen Village, Nove, Ukraine**

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**Capacity:**

200kW / 400kWh & 1MW / 1.72MWh

2\*KAC50DP-BC100DE + 2\*STS100D for backup power during outages

8\*KAC125DP-BC215DE for peak shaving and cost reduction

Dynamic energy solutions for a resilient community



## Project Cases - Energy Independence (off-grid)

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**Location:**

**Oaxaca, Mexico**

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**Capacity:**

400kW / 600kWh

8 units of KAC50DP + 6 units of BC100DE + 2 units of STS100

Off-grid system running for over 500 ppl on the island

# 01

## Case - Self Consumption



## Project Cases - Self Consumption

**Location:**  
**Milanovo, Bulgaria**

**Capacity:**  
250kW / 494kWh  
5\*KAC50DP + 2\*BC197DE + BC100DE  
Reduce utility cost for local dairy factory Parshevitsa



## Project Cases - Self Consumption

**Location:**

**Ruse, Bulgaria**

**Capacity:**

3\*KAC125DH-BC233DE

Charging from AC-couple installation

Reduce utility cost for local butchery Borimes Ltd.



## Project Cases - Self Consumption

**Location:**  
Lovets, Bulgaria

**Capacity:**  
125kW / 215kWh  
KAC125DH-BC215DE  
Charging from AC-couple installation





## Project Cases - Self Consumption

**Location:**

**Dobri Dol, Bulgaria**

**Capacity:**

250kW / 494kWh

5\*KAC50DP + 2\*BC197DE + BC100DE

Reduce utility cost for local milk farm





## Project Cases - Self Consumption

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**Location:**

**Bykev, Czech Republic**

---

**Capacity:**

100kW / 200kWh

2\*KAC50DP-BC100DE + STS100

Reliable backup power for cardboard factory

## Project Cases - Self Consumption

**Location:**

**Bakov nad Jizerou, Czech Republic**

**Capacity:**

50kW / 197kWh

KAC50DP-BC197DE

Reliable solar solution for energy-intensive veterinary surgery and indoor pool heating





## Project Cases - Self Consumption

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**Location:**  
**Rodnow, Poland**

---

**Capacity:**  
50kW / 100kWh  
KAC50DP-BC100DE + STS100D

Integrated with existing PV and diesel generator

Decreased grid dependency with seamless backup for entire bakery

Optimized diesel generator usage through STS integration



## Project Cases - Self Consumption

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**Location:**

**Deszk, Hungary**

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**Capacity:**

250kW / 500kWh

5 Units of KAC50DP-BC100DE + STS250

On/off grid switching for regional blackouts

Stable power supply for water pumps, help with agri-PV





## Project Cases - Self Consumption

---

**Location:**  
**Bulgaria**

---

**Capacity:**  
100kW / 394kWh  
2 units of KAC50DP-BC197DE



## Project Cases - Self Consumption

---

**Location:**

**Molding Factory, Lichtenstein, Germany**

---

**Capacity:**

100kW / 200kWh

2 units of KAC50DP-BC100DE



## Project Cases - Self Consumption

---

**Location:**  
**Murovane, Ukraine**

---

**Capacity:**  
100kW / 394kWh  
2 units of KAC50DP-BC197DE + EMS01D

## Project Cases - Self Consumption

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**Location:**  
**Verona, Italy**

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**Capacity:**  
100kW / 100kWh  
40kW on-grid inverter with KAC50DP-BC100DE





## Project Cases - Self Consumption

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**Location:**

**Casaleto vaprio, Italy**

---

**Capacity:**

100kW / 197kWh

2\*KAC50DP-BC197DE

## Project Cases - Self Consumption

**Location:**

**Milk farm, Chernihivskyi region, v. Tarasa Shevchenka, Ukraine**

**Capacity:**

200kW / 394kWh

2 units of 2\*KAC50DP-BC197DE + STS250D



## Project Cases - Self Consumption

---

**Location:**

**Petrol station with car wash, Chromna, Poland**

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**Capacity:**

50kW / 100kWh

KAC50DP-BC100DE + STS100D



## Project Cases - Self Consumption

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**Location:**

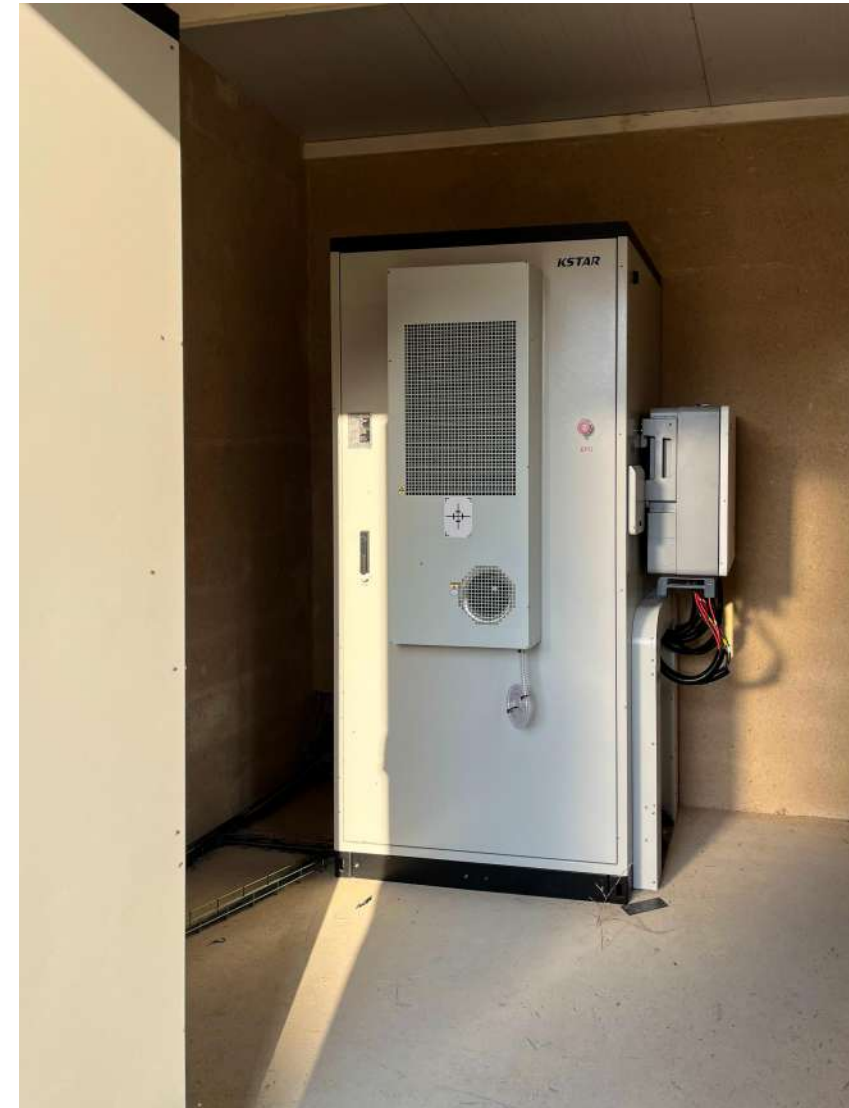
**Valladolid, Spain; Agrivoltaics with water pump and diesel generator**

---

**Capacity:**

50kW / 100kWh

KAC50DP-BC100DE + STS100D



## Project Cases - Self Consumption

---

**Location:**

**Esztergom, Hungary**

---

**Capacity:**

250kW / 500kWh

KAC50DP-BC100DE + STS100D

Continuous off-grid operation for regional blackouts

Stable power supply for Zen Temple

Zero export to grid



## Project Cases - Self Consumption

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**Location:**

**Andalucía, Spain**

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**Capacity:**

100kW / 197kWh

2\*KAC50DP-BC197DE

Reduce electricity bill for project owner





## Project Cases - Self Consumption

---

**Location:**  
**Azerbaijan**

---

**Capacity:**  
100kW / 396kWh  
2 units of KAC50DP-BC197DE + STS100D

## Project Cases - Self Consumption

### Location:

Bukovel ski-resort, Polianytsa, Ukraine

### Capacity:

100kW / 197kWh

2\*KAC50DP-BC197DE



## Project Cases - Self Consumption

---

**Location:**  
**Brescia, Italy**

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**Capacity:**  
50kW / 100kWh



## Project Cases - Self Consumption

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**Location:**

**Factory and house mixed, Brescia, Italy**

---

**Capacity:**

50kW / 100kWh

Mainly used for charging EV





## Project Cases - Self Consumption

---

**Location:**  
**Lithuania**

---

**Capacity:**  
100kW, 197kWh  
2\*KAC50DP-BC197DE



## Project Cases - Self Consumption

Location:  
Italy

Capacity:  
50kW / 100kWh



## Project Cases - Self Consumption

**Location:**  
**Badajoz, Spain**

**Capacity:**  
150kW / 300kWh (Retrofit)



## Project Cases - Self Consumption

---

**Location:**

**Gabrovo, Bulgaria**

---

**Capacity:**

100kW / 197kWh

2\*KAC50DP-BC197DE



## Project Cases - Self Consumption

**Location:**  
**Magánkórház, Hungary (Hospital)**

**Capacity:**  
100kW / 200kWh  
STS100 (on/off grid switching)





## Project Cases - Self Consumption

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**Location:**

**Varna, Bulgaria**

---

**Capacity:**

125kW / 215kWh

KAC125DH-BC215DE



## Project Cases - Self Consumption

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**Location:**

**Westhoek, Netherlands**

---

**Capacity:**

50kW / 100kWh

## Project Cases - Self Consumption

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Location:

Olive Oil Mill, Ignazia BN, Italy

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Capacity:

50kW / 100kWh



## Project Cases - Self Consumption

Location:

**Kazanlak Kazanlyk, Bulgaria**

Capacity:

50kW / 100kWh



## Project Cases - Self Consumption

Location:

2\*2kW AC Charge Stations, Turkey

Capacity:

50kW / 100kWh





## Project Cases - Self Consumption

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**Location:**  
**Dunavecse, Hungary**

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**Capacity:**  
150kW / 300kWh

# 02

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## Case - Peak Shaving



## Project Cases - Peak Shaving

**Location:**  
**Poland**

**Capacity:**

50kW / 100kWh

BluE-20KT-M1\*2 + KAC50-BC100DE + STS100D

STS100D integrates with diesel generator for off-grid backup

Weak grid causes voltage rise on high export and drops on high import

Battery charges during excess generation and discharges during peak grid demand





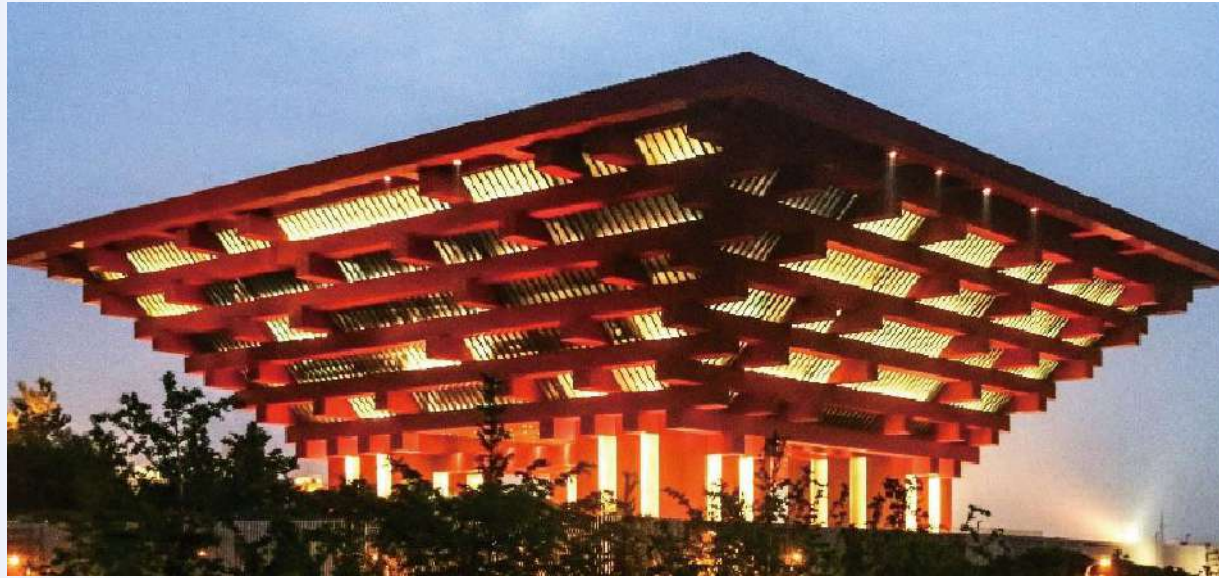
## Project Cases - Peak Shaving

---

**Location:**  
**Žirovnica, Slovenia**

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**Capacity:**  
50kW / 100kWh



## Project Cases - Peak Shaving

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**Location:**

**World Expo Park, Shanghai, China**

---

**Capacity:**

50kW / 100kWh

# 03

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## Case - Time of Use



## Project Cases - Time of Use

### Location:

Rome, Italy

### Capacity:

100kW / 400kWh

2 units of KAC50DP, 4 units of BC100DE

With 1 unit EMS01D





## Project Cases - Time of Use

---

**Location:**  
**Chelmiec, Poland**

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**Capacity:**  
50kW / 100kWh

# 04

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## Case - Dynamic Control



## Project Cases - Dynamic Control

**Location:**  
**Radawa, Poland**

**Capacity:**  
150kW / 300kWh  
Integrate with existing automatic systems in the facility



## Project Cases - Dynamic Control

**Location:**  
**Poland**

**Capacity:**

100kW / 300kWh

Integrate with existing automatic systems in the facility





## Project Cases - Dynamic Control

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**Location:**

**Geldermalsen Apple Farm, Netherlands**

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**Capacity:**

200kW / 400kWh

## Project Cases - Dynamic Control

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**Location:**

**Geldermalsen, Netherlands**

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**Capacity:**

250kW / 500kWh





## Project Cases - Dynamic Control

---

**Location:**  
**Schiedam, Netherlands**

---

**Capacity:**  
150kW / 100kWh

## Project Cases - Dynamic Control

**Location:**  
**Charging stations and restaurants on the highway,  
Hatvan, Hungary**

**Capacity:**  
50kW / 100kWh





## Project Cases - Dynamic Control

---

**Location:**  
**Netherlands**

---

**Capacity:**  
150kW / 300kWh

## Project Cases - Dynamic Control

**Location:**  
**Ospel, Netherlands**

**Capacity:**  
150kW / 300kWh





## Project Cases - Dynamic Control

---

**Location:**  
**Cegled, Hungary**

---

**Capacity:**  
50kW / 100kWh

## Project Cases - Dynamic Control

**Location:**  
**Vessem, Netherlands**

**Capacity:**  
100kW / 200kWh



## Project Cases - Dynamic Control

**Location:**  
**Helmond, Netherlands**

**Capacity:**  
50kW / 100kWh



# Generating Superior Solutions for Energy and More.



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