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**Sungrow**

**13 September 2023**

2:00 pm – 3:00 pm | BST, London  
3:00 pm – 4:00 pm | CEST, Berlin, Paris  
4:00 pm – 5:00 pm | EEST, Athens



**Mark Hutchins**  
Editor  
pv magazine

pv magazine  
**webinars**


# Empowering energy savings at home



**Saleh Alnsour**  
Product Manager Hybrid/Battery Distribution  
Sungrow

# Welcome!

Do you have any questions? ? 

Send them in via the Q&A tab.  We aim to answer as many as we can today!

You can also let us know of any tech problems there.

We are recording this webinar today. 

We'll let you know by email where to find it and the slide deck, so you can re-watch it at your convenience.  



**SUNGROW**  
Clean power for all



The background of the advertisement features a lush green rooftop garden with various plants and trees. In the foreground, several rows of solar panels are visible, extending from the bottom right towards the center. In the background, a city skyline with several tall, modern glass skyscrapers is visible under a clear blue sky. The sun is shining brightly from the right side, creating a warm, golden glow and casting long shadows across the rooftop garden.

# SUNGROW EUROPE

Empowering energy savings at home



# YOUR SPEAKER FOR TODAY



**SALEH ALNSOUR**

Product Manager Hybrid/Battery  
Distribution

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# AGENDA

Empowering energy savings at home

THAT'S  
US

Sungrow  
Introduction

1

Sungrow  
Residential  
Portfolio

2

Importance of  
self  
consumption

3

HYBRID  
SAVINGS

Case study 1

4

Case study 2

5

Conclusion

6

# KEY FACTS

100% commitment to Green Energy



**150+**  
**COUNTRIES**

20+ Local Subsidiaries  
370+ Service Outlets



**340**  
**GIGAWATT**

Deployed  
Worldwide  
by December 2022



**119**  
**GIGAWATT**

Shipped PV  
Inverters  
in 2022



**30+%**  
Global Market  
Share 2021



**Largest**  
EMC Chamber  
in the PV World



**3.77 BILLION**  
**USD**

Global Sales  
Revenue  
in 2021



**40+%**  
Proportion  
of Technical  
R&D Personnel



**Up to 99%**  
Efficiency  
of PV inverters



# WHAT WE DO

CLEAN TECH ENERGY TO POWER THE WORLD



PV  
INVERTERS



ENERGY  
STORAGE  
SYSTEMS



PROJECT  
DEVELOPMENT



EV  
CHARGING  
SOLUTIONS



HYDROGEN

SUNGROW EMEA EXPERTISE

SUNGROW EMEA R&D



A man with a beard, wearing a blue suit, is sitting on a concrete ledge outdoors. He is smiling and looking at a laptop computer that is open on his lap. He is typing on the keyboard. The background is a blurred city street with buildings and a clear sky. An orange banner with white text is overlaid on the image.

# PORTFOLIO EXCELLENCE

Covering all demands (from 3 kW to 8.8 MW)

**SUNGROW**  
Clean power for all



# RESIDENTIAL HYBRID INVERTERS

INCREASE SELF-CONSUMPTION TO THE FULLEST



- 1-phase & 3-phase portfolio
- Quick & easy installation
- Compatible with Sungrow and BYD battery
- Integrated back up solution
- Free of charge monitoring
- Live Data in iSolarCloud



# RESIDENTIAL BATTERY

INCREASE SELF-CONSUMPTION TO THE FULLEST



- Scalable from 9.6 up to 25.6 kWh
- Modular system
- 33 kg per module – easy installation
- Available with 1- & 3-phase Hybrid inverter
- Free of charge monitoring



# RESIDENTIAL EV CHARGING

SMART AND FULLY INTEGRATED



- Available with 1- & 3-phase Hybrid inverter + Battery
- Available as 7 or 11 kW version
- 4 different charging modes
- Fully integrated into iSolarCloud
- All products from one supplier



# THE 3-PHASE SOLUTION

BEYOND THE  
EXPECTED



# IMPORTANCE OF SELF- CONSUMPTION

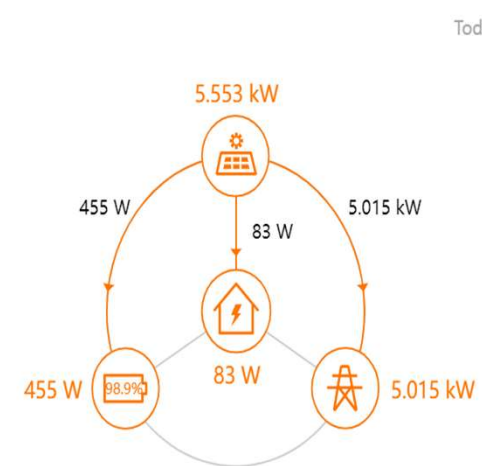
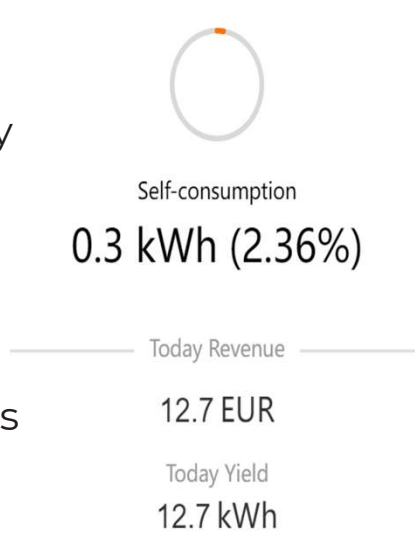
- Economic Benefits**
- Environmental Benefits**
- Energy Independence**



SUNGROW

# ECONOMIC BENEFITS

Self-consumption of solar energy means using the power you generate, reducing the need to buy from the grid. This directly lowers monthly energy bills. Especially where feed-in tariffs are low, maximizing self-consumption ensures you get the most value from your solar system, saving costs and promoting sustainable energy use.



# ENVIRONMENTAL BENEFITS

Self-consumption of solar energy reduces reliance on fossil fuels, decreasing greenhouse gas emissions. By using power generated on-site, we lessen the environmental impact associated with energy production and transport, contributing to a cleaner, more sustainable future.

Calculation Standards for Energy Conservation and Emissions Reduction of PV Power Generation

1 kWh PV Yield equals to	
CO <sub>2</sub> Reduction	0.997kg
Save Standard Coal	0.404kg
Tree	0.054trees

Carbon dioxide emission reduction, standard coal saving and equivalent tree planting index data are calculated based on the total yield of the plant. If the plant already has yield before using iSolarCloud, the existing yield cannot be counted in the calculation of energy saving and emission reduction data.

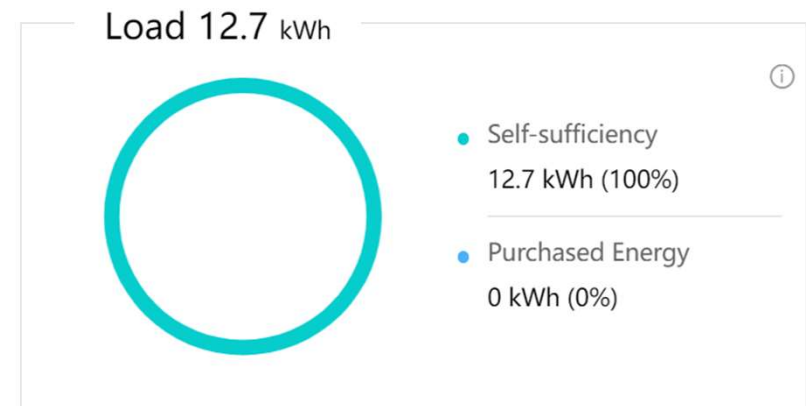
 CO<sub>2</sub> Reduction **1.46 Ton**

 Save Standard Coal **590.2 kg**

 Tree **79.53 trees**

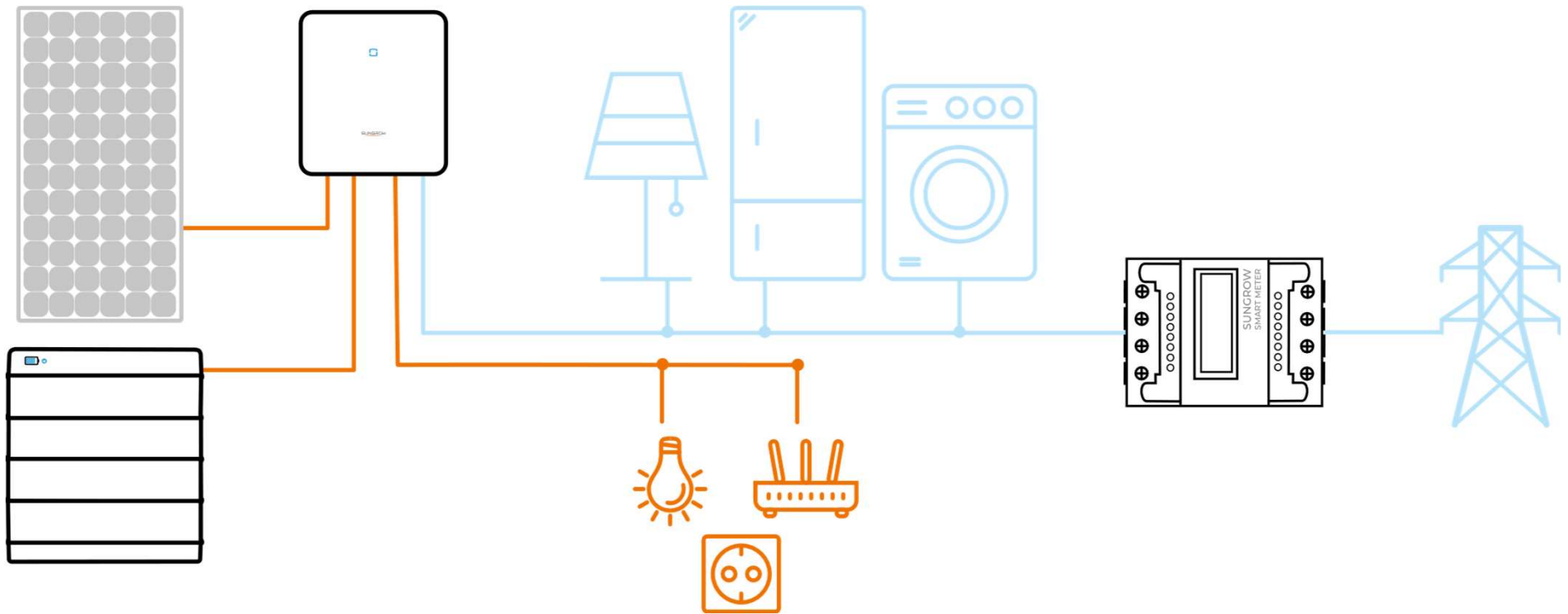
# ENERGY INDEPENDENCE

Self-consumption enhances energy independence by reducing reliance on external power sources. By using solar energy produced on-site, homes and businesses can operate more autonomously, buffering against grid outages and fluctuating energy prices.

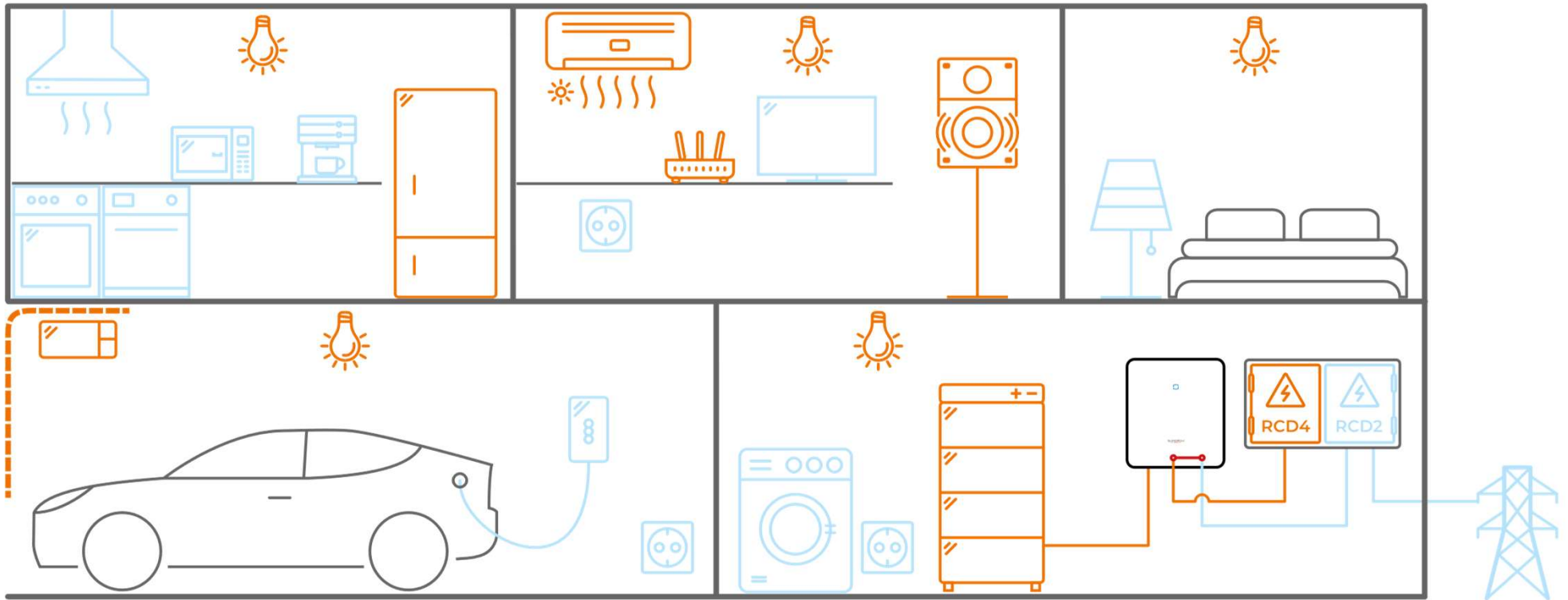




# BACKUP MODE - WIRING

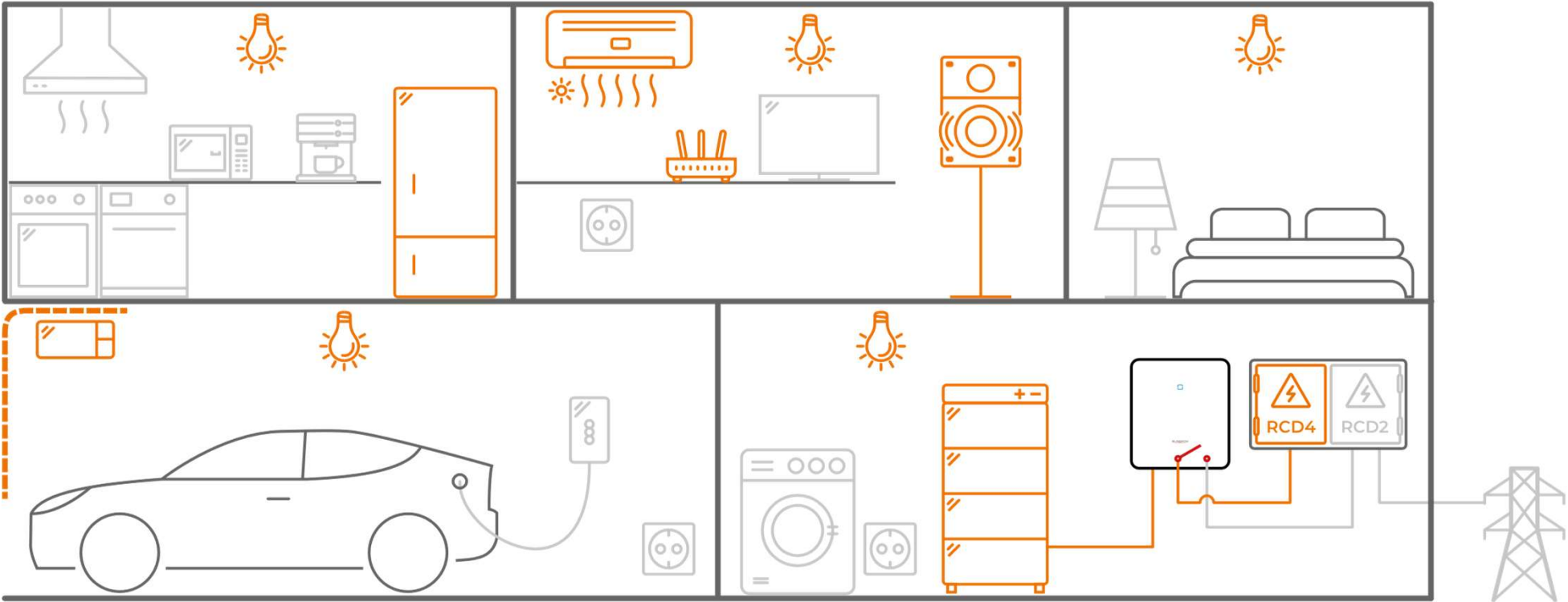


# BACKUP MODE – HOW IT WORKS



GRID CONNECTED

# BACKUP MODE – HOW IT WORKS



GRID OUTAGE

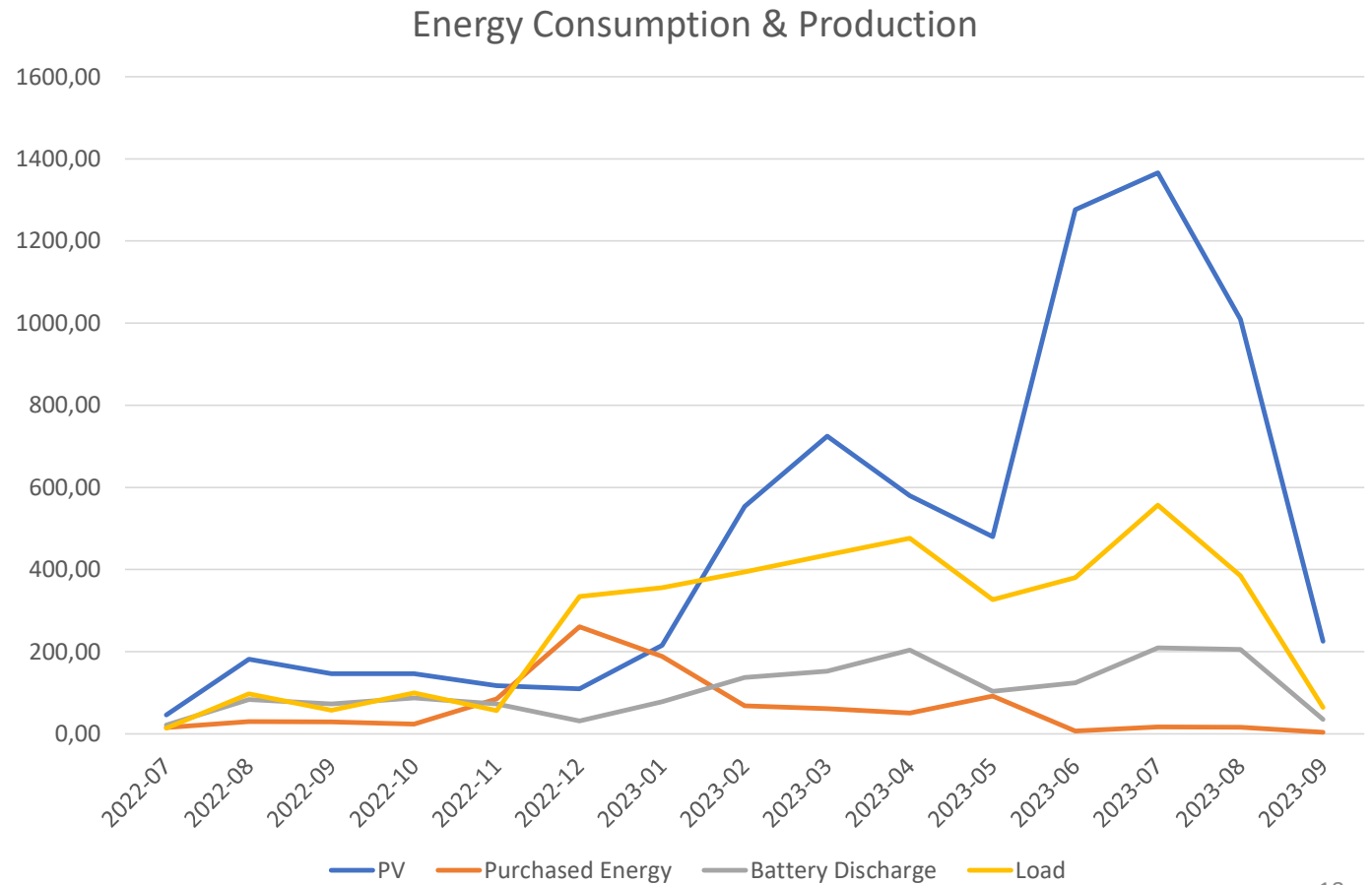
# Case Study 1

Location: Italy

Inverter: Single-phase hybrid SH6.0RS

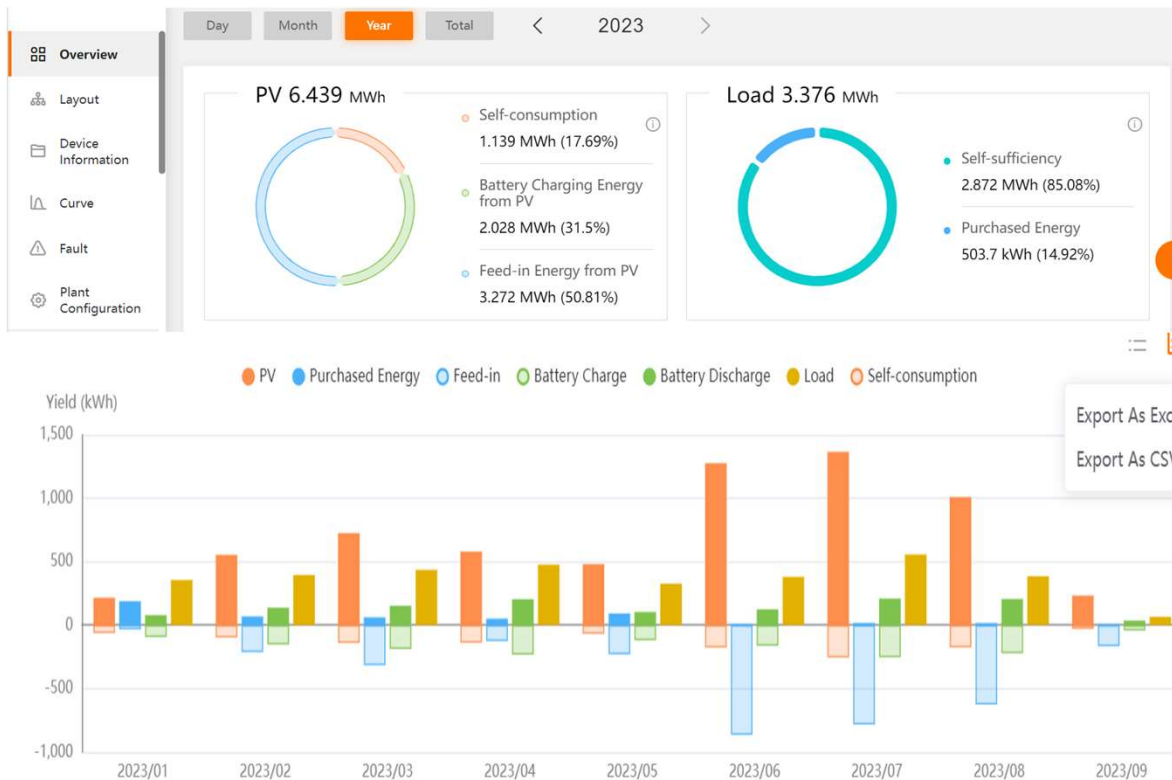
Battery Capacity: 19.2kWh

Time Period: July 2022 to September 2023



# Case Study 1

Calculating the savings using the data from iSolarCloud



Click here to generate a report

# Case Study 1

Calculating the savings using the data from iSolarCloud

Time	PV(kWh)	Purchased Energy(kWh)	Feed-in(kWh)	Battery Charge(kWh)	Battery Discharge(kWh)	Load(kWh)	Self-consumption(kWh)
2022-07	46,00	15,20	13,40	31,10	21,80	13,90	20,50
2022-08	181,90	30,10	15,00	107,50	83,90	97,60	59,40
2022-09	146,90	29,10	0,00	93,20	73,00	57,20	53,70
2022-10	146,50	24,00	0,10	110,70	87,70	99,70	35,80

Breaking Down Your Monthly Data:

**PV (kWh):** Energy generated from your solar panels.

**Purchased Energy (kWh):** Energy bought from the grid.

**Feed-in (kWh):** Excess energy sold back to the grid.

**Battery Charge/Discharge (kWh):** Energy stored in and used from your battery.

**Self-consumption (kWh):** Energy consumed that hasn't been purchased or fed back into the grid.

# Case Study 1

Calculating the savings using the data from iSolarCloud

## 1. Savings from Solar (PV) and Battery:

PV: Self-consumption(kWh) x Cost of Electricity

Battery: Battery Discharge(kWh) x Cost of Electricity

## 2. Revenue from Feed-in: Feed-in(kWh) x Feed-in Tariff

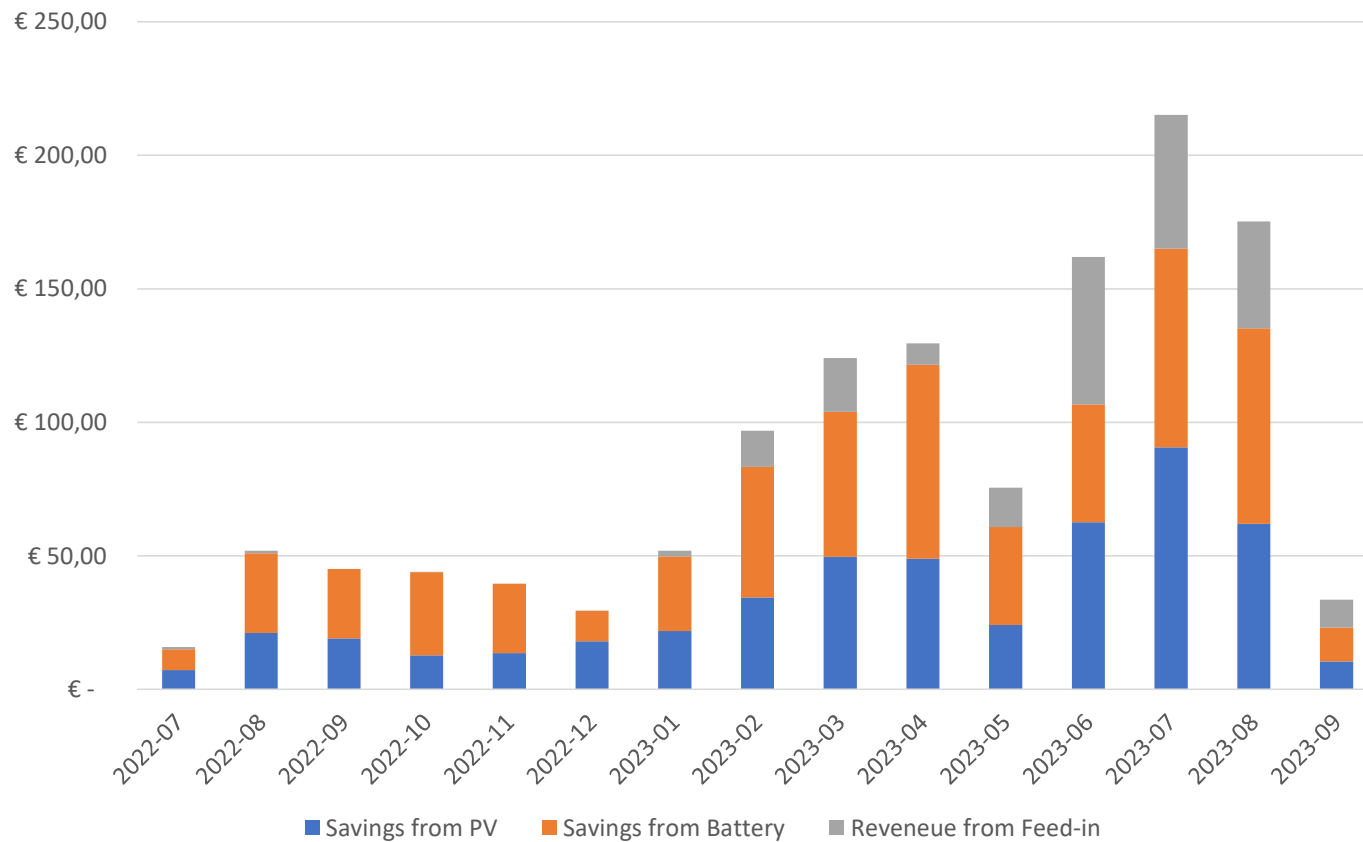
## 3. Cost of Purchased Energy: Purchased Energy(kWh) x Cost of Electricity

## 4. Net Savings: PV Savings + Battery Savings + Revenue from Feed-in - Cost of Purchased Energy

# Case Study 1

Calculating the savings using the data from iSolarCloud

**Savings :**

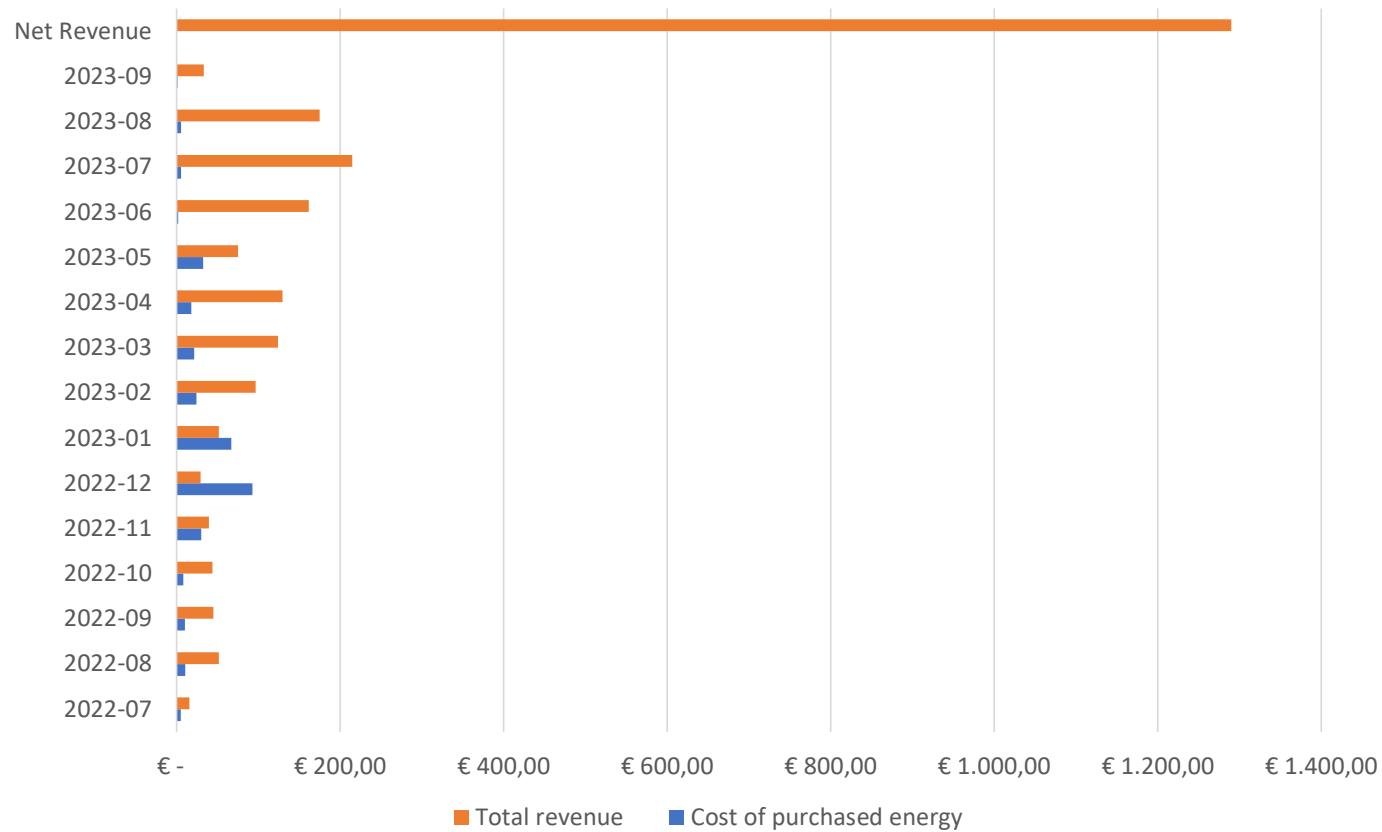




# Case Study 1

Calculating the savings using the data from iSolarCloud

Revenue vs Energy Costs



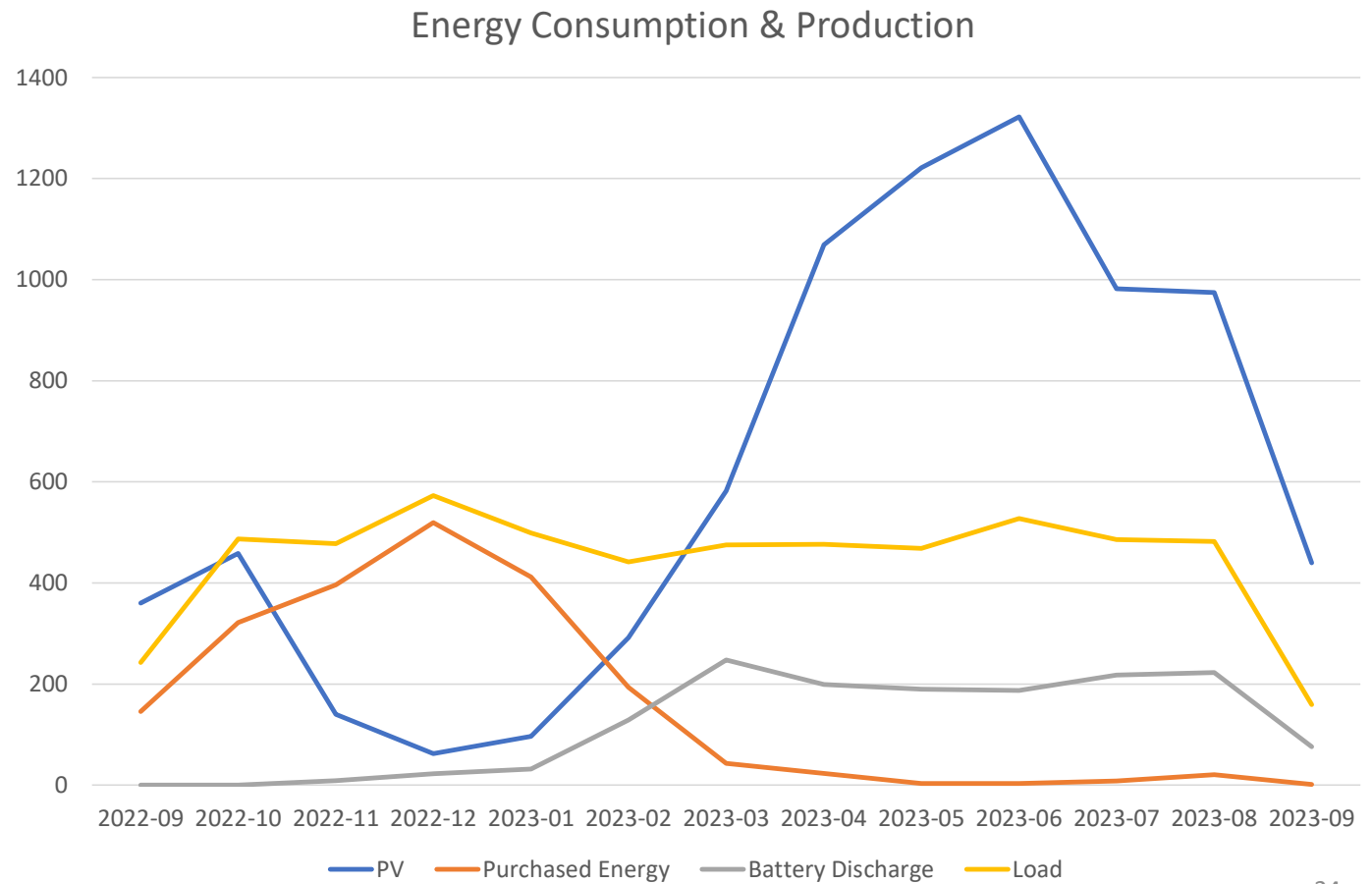
# Case Study 2

Location: Germany,  
Bavaria

Inverter: Three-phase  
hybrid  
SH8.0RT

Battery Capacity:  
16.0kWh

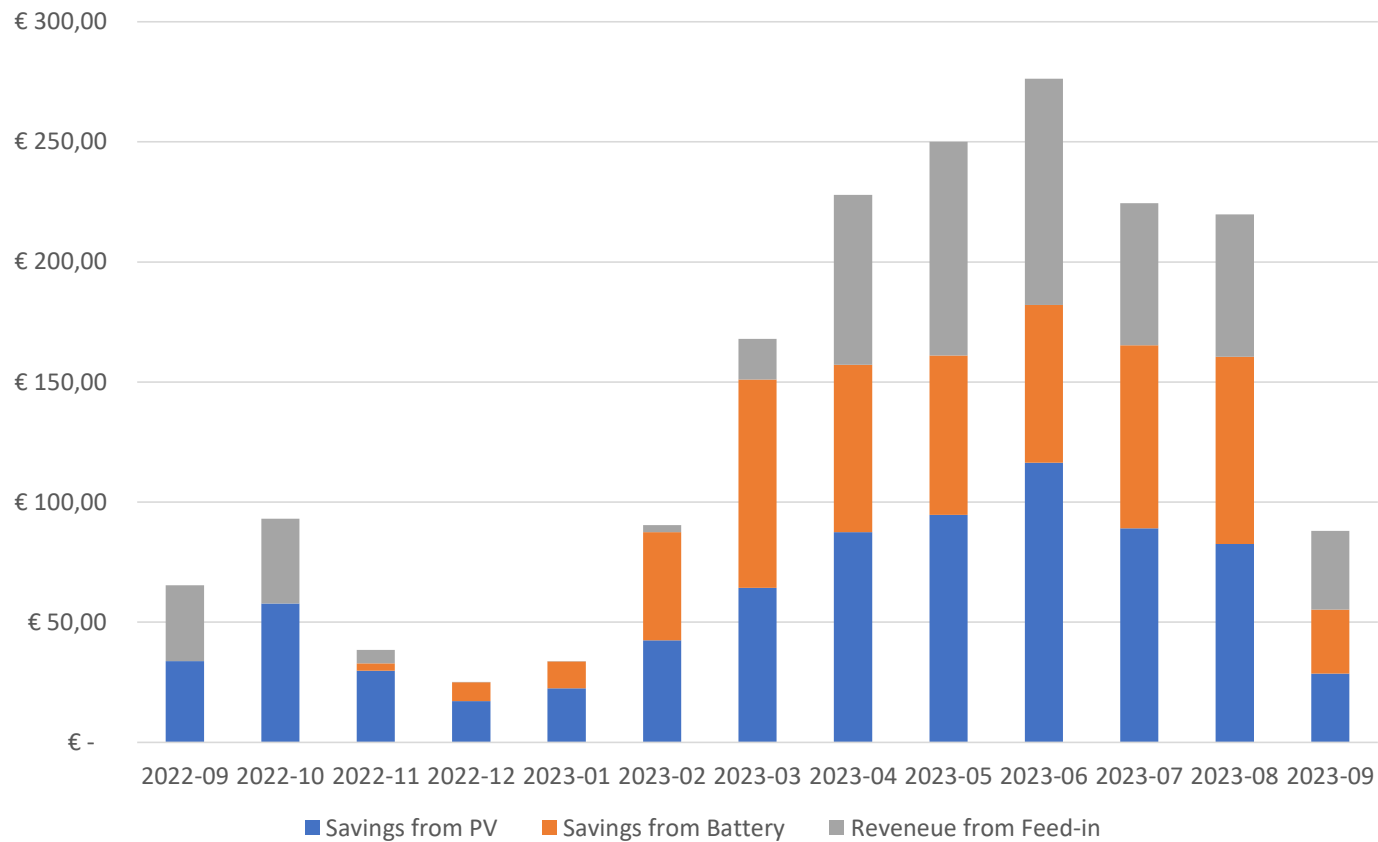
Time Period:  
Septmeber 2022 to  
September 2023



# Case Study 2

Calculating the savings using the data from iSolarCloud

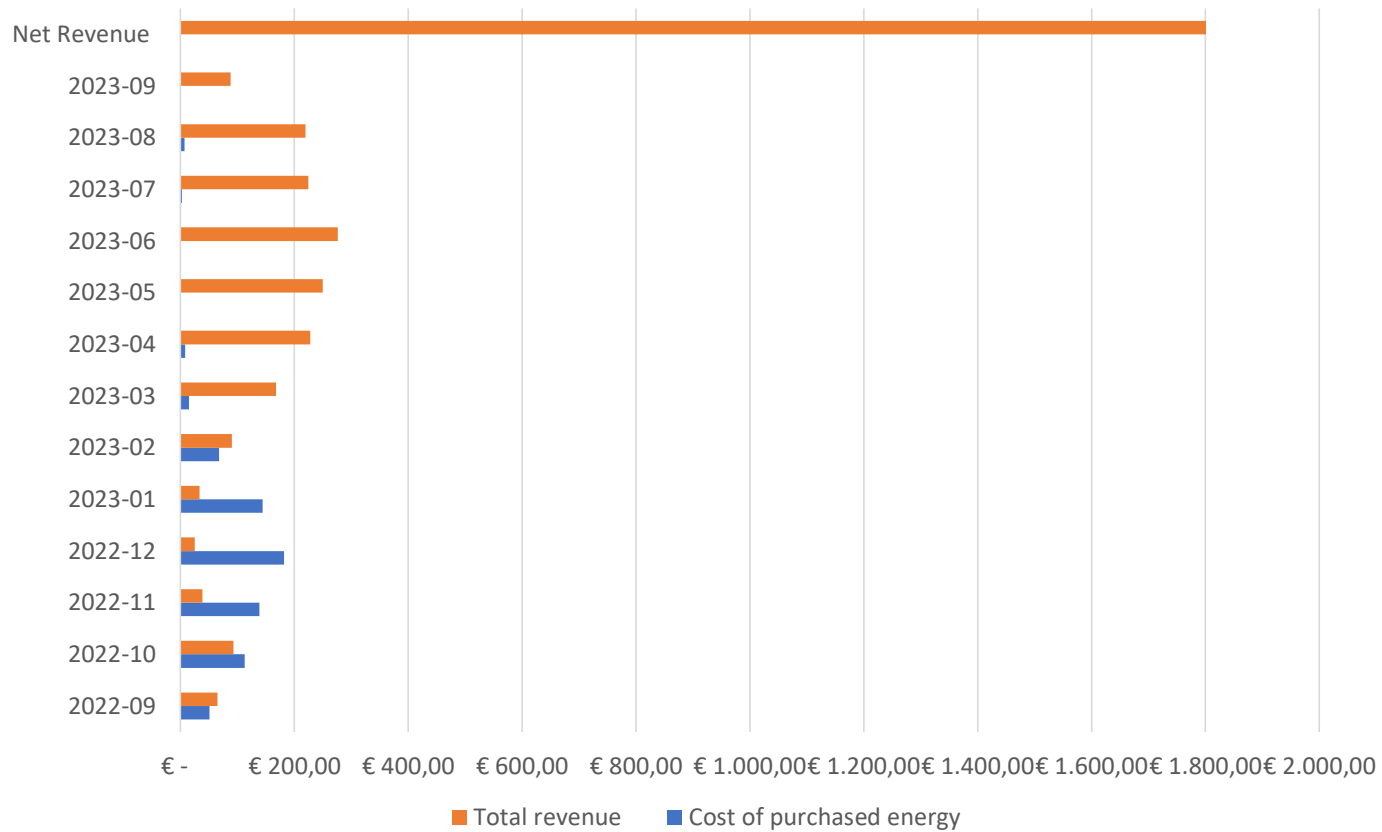
Savings :



# Case Study 2

Calculating the savings using the data from iSolarCloud

### Revenue vs Energy Costs



# THE 3-PHASE SOLUTION

SAVE MORE  
WITH OUR  
EV-CHARGER



# SUNGROW AC CHARGER

Maximize Savings with Self-Consumption & Advanced Solar Integration

**GREEN POWER CHARGING:** Economical EV charging with PV excess.

**Optimize every kilowatt:** Direct solar energy to household needs & EV charging.

**Seamless Management:** All-in-one app for solar, battery, and EV.

**Adapt & Save:** Unique 3-to-1 phase switching.

**Speedy ROI:** Boost savings and accelerate your investment return.

# MAXIMUM SAVINGS

Tips to save even more

**Choose suitable PV plant that covers your needs:** Opt for a system size that matches your consumption to optimize ROI.

**Batteries are essential to maximize savings:** Storing excess solar energy ensures you use more of what you produce, leading to greater savings.

**Pay attention for charging times for your battery and EV car:** Timed charging during low-demand or peak solar output can drastically reduce energy costs.

**Expand Your Storage If Necessary:** Upgrading your battery capacity can cater to increased energy needs and further enhance self-consumption benefits.

**Leverage Governmental Incentives:** Ensure your system qualifies for local subsidies or tax benefits to further decrease costs.

# WRAP-UP

Embrace the Future of Energy

- Self-consumption is the key to energy independence and financial savings.
- Hybrid inverters, batteries, and EV chargers from Sungrow make the most of your rooftop solar.
- Financial and environmental benefits await those who optimize their energy systems.
- Take the next step: Explore how Sungrow can empower your energy journey!



CLEAN POWER FOR ALL



[www.sungrowpower.com](http://www.sungrowpower.com)

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## Q&A



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Product Manager Hybrid/Battery Distribution  
Sungrow

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Most-read online!

## Heat pump design to reduce footprint of solar thermal installations

by Lior Kahana



# Coming up next...

## Monday, 18 September 2023

10:00 am – 11:00 am BST, London

11:00 am – 12:00 pm CEST, Berlin, Paris, Madrid

## Wednesday, 20 September 2023

10:00 am – 11:00 am EDT, New York City

4:00 pm – 5:00 pm CEST, Berlin, Paris, Madrid

Many more to come!

**Evolution of the  
“1+X” modular  
inverter**

**BESS diagnostics  
for holistic  
lifecycle  
management**

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Editor  
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**Thank you for  
joining today!**