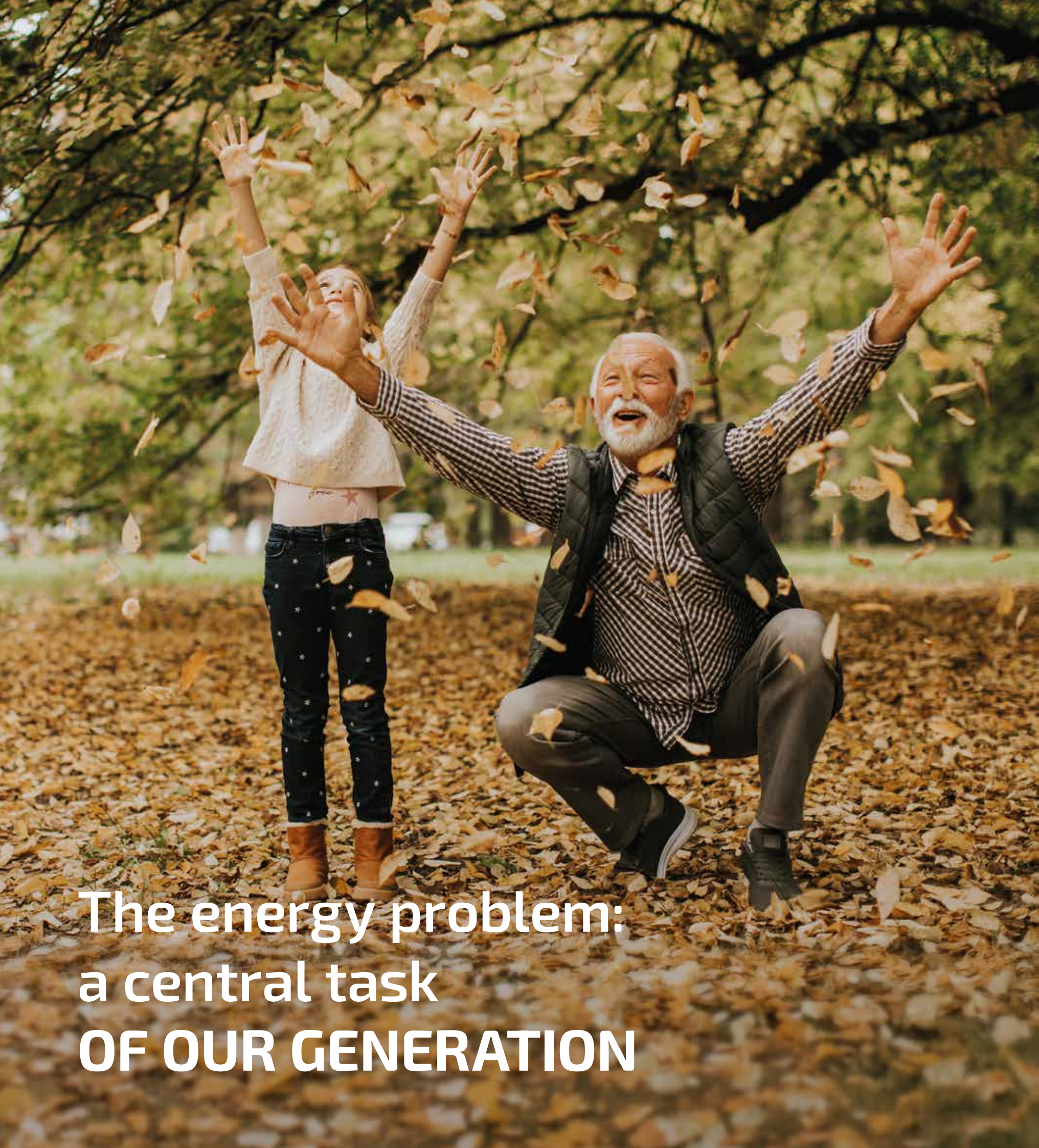


IT'S YOUR ENERGY JOURNEY

FENECON Home & Commercial

A young girl and an elderly man are playing in a park. The girl is standing on the left, wearing a light-colored sweater and dark pants with white stars, with her arms raised. The man is crouching on the right, wearing a striped shirt and a dark vest, also with his arms raised. They are surrounded by falling yellow and orange autumn leaves. The background shows more trees and a grassy area.

The energy problem: a central task OF OUR GENERATION

Individual Energy Journeys are the key

Since 2011 we have been developing electrical energy storage solutions and energy management systems with one clear vision in mind: The 100 % energy transition. Finding an answer to the question of energy production is one of the central tasks of our generation — And we already have the technologies to turn ideas into actions. The sun, wind power, electricity storage systems and an intelligent energy management are the cornerstones of a sustainable energy system.

Our goal: Electricity, mobility and heat provided at minimal costs, climate-friendly and without becoming dependent on anyone. Our solutions provide room for creativity — independence, flexibility, and protection from external influences. We rely on strong local partners, as the energy transition takes place on a regional level.

Let's shape the future of energy together. Whether an electric car, heat pump, PV system expansion or time-of-use tariffs and variable grid charges: With FENECON systems, the FEMS energy management and FEMS Apps, the system adapts flexibly to your requirements.

Each Energy Journey is unique:
It's Your Energy Journey!



IT'S YOUR ENERGY JOURNEY

Flexibly shape your path into a future with 100 % renewable energies

Challenges of personal energy transition

- The transition to renewable energies takes place step by step.
- Likewise, new consumers (e. g. a heat pump, electric car) and corresponding requirements to PV plants and energy storage systems are introduced step by step.
- New regulations and technologies appear over the course of time.

Solutions by FENECON

- FENECON solutions are always developed with the future perspective in mind: A world where the energy transition has already happened.
- Flexible & adjustable building blocks of the Energy Journey and free software updates.
- The open-source approach allows the explicit focus on the integration of several energy providers, wall-boxes, and heat pumps by several manufacturers.

Dimensions of the Energy Journey



Electrical Energy Storage with EMS



Heating & Air conditioning



Mobility



Production & Feed-in management



Grid withdrawal management



IT'S YOUR ENERGY JOURNEY

HOME & COMMERCIAL



Battery storage incl. EMS

Inhouse service & support



Heating & air conditioning

Heat pump



Mobility

Provider-independent



Power production & feed-in management

Avoidance of curtailment



Grid withdrawal management

back-up power supply

Today

BEV charging park

Cyber security & data protection

Heating element

Grid-optimized charging

Dimmable in accordance with §14a EnWG

Capacity expansion

Solar-power optimized

Solar-power optimized

Electricity-price optimized

PV extension

Dynamic tariffs

Tomorrow

Power output expansion

Air conditioner

Optimization across sectors

Direct marketing

Provider-independent

FEMS apps extension

Solar-power optimized

Time-delayed feed-in

Intraday market participation

Dynamic grid charges

The day after

AI assistant for your Energy Journey

Optimization across sectors

Bidirectional charging

Post-EEG



The beginning of an ever-continuing journey

Thanks to a modular system that is upgradable to your requirements

The first step: Store electricity and manage it intelligently with your EMS

Your Energy Journey never ends. Thus, your system and EMS should be able to grow with your requirements.

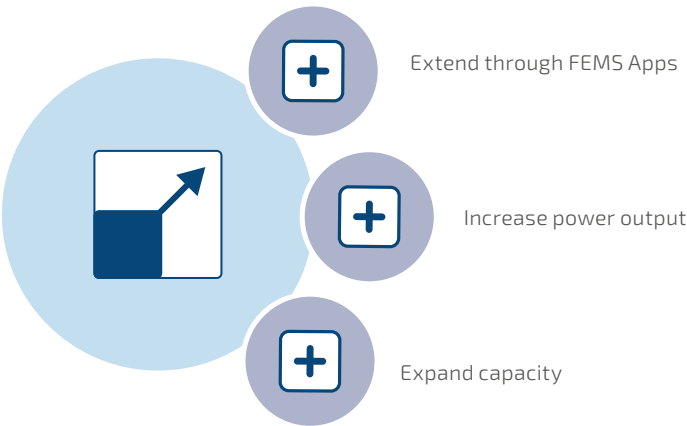
The FENECON Energy Management System (FEMS) thinks about tomorrow today and adapts flexibly to your growing requirements.

The system already includes:

- System expansion for future requirements (see p. 5)
- An effective in-house service department (see p. 5)
- Cyber security and data protection
- Your future, personal AI-powered energy assistant



Upgradable systems to meet increasing requirements



An effective in-house service department





A system that chooses the best path for your day

Our EMS is your daily companion, real-time decision-maker and future planner

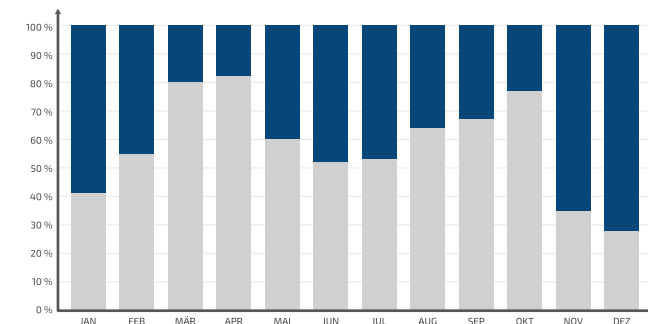
With every step on your personal Energy Journey, the energy you consume becomes cheaper, cleaner, and you become more independent. Simultaneously, the complexity increases: When should energy be drawn from the grid or fed into the grid? When should the electric car be

charged and the heat pump operated? When should the electricity storage system charge or discharge? This is where our intelligent energy management system can play to its strengths for optimization.



The easiest way to optimize: A forecast-based EMS.

Did you know that battery systems with conventional self-consumption optimization are utilized to only 60 % on average? During winter the battery capacity often remains unused during the day, while during summer, leftover energy is stored overnight. With FENECON, you can utilize your system to 100 % thanks to forecast-based energy management.



Example: 10 kWp, southern PV orientation | 8.8 kWh battery

Traditional use of capacity

Potential for optimization

Anticipatory control instead of daily adjustments

Your time is too valuable to adjust everything manually. In the future, FEMS will manage your energy consumption using its AI-based energy schedule, not only in real-time, but also for the next 36 hours to come. The software will consider:



Legal regulations



Time-variable network charges



Your PV system



Your heat pump



Your charging station

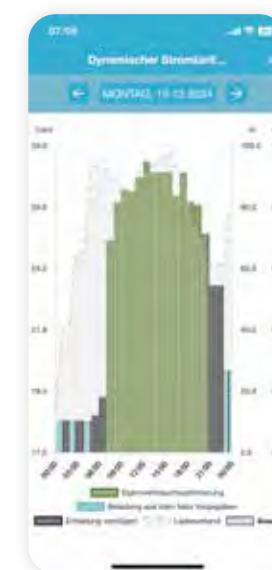


Time-of-use tariffs

A user-friendly energy manager



Transparent historic view



FEMS App Center



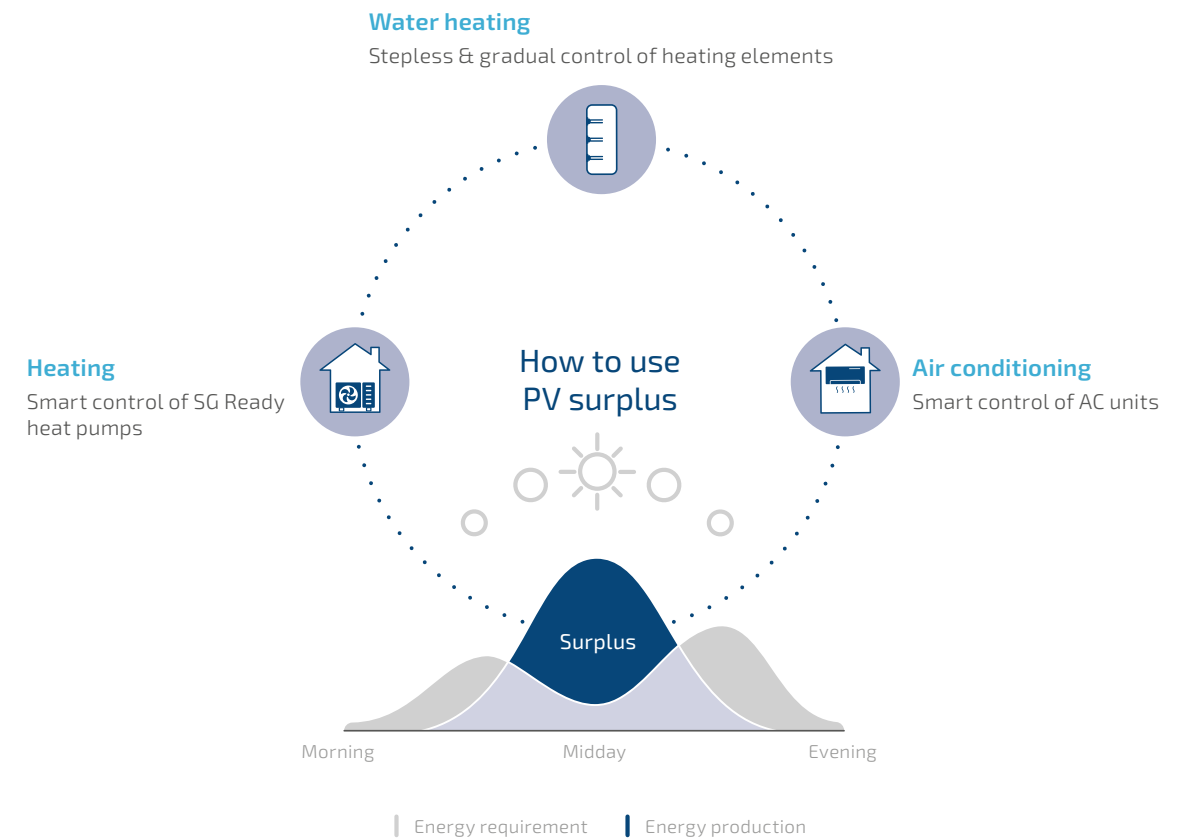


Always the right temperature

Smart integration of heat pumps, heating elements, and air conditioning

Heating is among the most energy-consuming household applications. Thus, electric heating represents one of the most important milestones on our journey to the 100 % energy transition. The FEMS App Power-to-Heat allows to use electricity from your own production directly to heat water or support your heating instead of feeding it into the grid at no gain.

How PV surplus is generated and can be used for heating and air conditioning is shown in the graphic to the right. All heat pumps with the "SG Ready" label can be integrated. FENECON also works with various manufacturers to ensure continuously increasing compatibility. This keeps your energy system flexible and future-proof.



Three steps to intelligent heat pump control

The integration of your heat pump into FEMS can be optimized step by step — for higher efficiency, lower costs and maximum utilization of your energy sources:

Solar optimization — Start here!

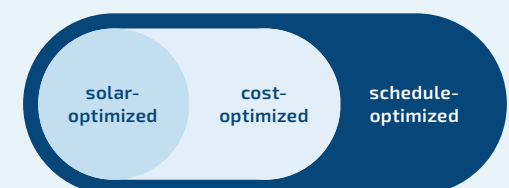
Simple and effective: The heat pump is controlled by FEMS in such way that it preferably runs at times when a surplus in solar power is available.

Cost optimization — A smart upgrade

Through the integration of time-use-tariffs, the heat pump can additionally be operated from the grid when electricity prices are low — ideal when combined with a PV system. Both solar power and low electricity prices are work together intelligently.

Schedule optimization — The ideal solution (currently under development)

Soon, FEMS will fully integrate heat pumps into an AI-based energy schedule — considering all factors like legal regulations, network charges and price forecasts. For maximum efficiency and autonomy — fully automated.





Full speed ahead for Your Energy Journey

Build your charging system your way.
Independent from manufacturer ecosystems and upgradable any time.

The perfect combination: E-Mobility & Electric energy storage systems

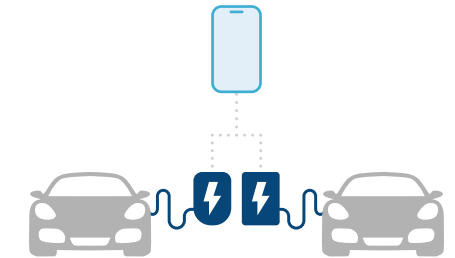
The combination of e-mobility and intelligent energy storage systems not only provides new opportunities for cost-effective energy supply, but also for sustainable

mobility. By using surplus solar power for charging electric vehicles directly, you increase your self-consumption significantly.



Choose your manufacturer

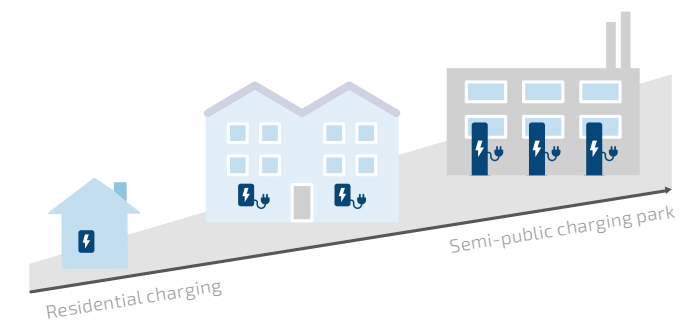
We are working with several manufacturers of AC and DC charging stations on further integrations.



... and more

Good for today, good for tomorrow

Our e-mobility solutions are modular, i. e. they can grow with your requirements. Maybe you only need one wallbox today. Tomorrow, you might have a second electric car and need another wallbox. You can choose from the whole range of compatible models.



Three steps to intelligent wallbox control

The integration of your charging station into FEMS can also be optimized step by step:

Solar optimization — Start here!

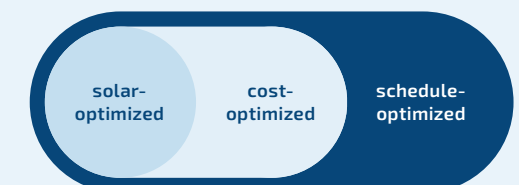
You electric car is primarily charged when there is a surplus of solar power available.

Cost optimization — A smart upgrade

By integrating time-of-use tariffs, times of low electricity prices on the market are taken into account. Your car is charged with solar power from your own plant or with power from the grid at the best price available.

Schedule optimization — The ideal solution (currently under development)

Soon, FEMS will also fully integrate your wallbox into an AI-based energy schedule. The schedule considers price forecasts, grid bottlenecks, legal regulations, and your personal mobility routines.





Making the most of summer

Avoid curtailment and charge battery-friendly

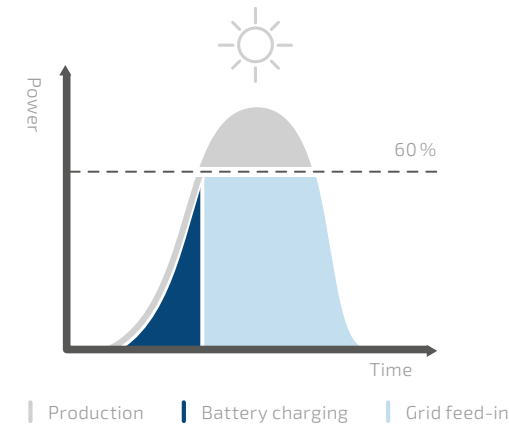
During the summer months, the optimization of self-consumption lies clearly in focus. Your system will charge primarily with surplus power from your PV plant and stores it for your own use. If you produce more, the excess energy is stored in a grid-friendly way. Your house runs

on your own, self-generated power, and the grid feed-in is reduced to a minimum. This avoids potential curtailment through the grid operator and minimizes stress on your battery system.

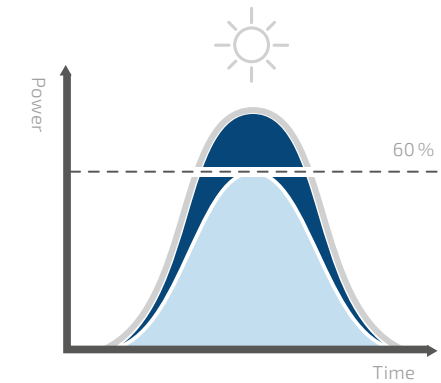


Grid-Optimized Charging as a standard with FENECON systems

Standard system



FENECON system

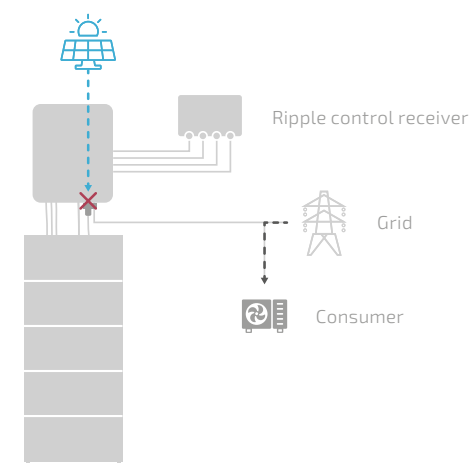


Traditional systems initiate charging when the sun comes out. The battery will be charged by midday and from this point will feed into the grid — but reduced to 60 % power. In contrast, a FENECON system works grid-optimized.

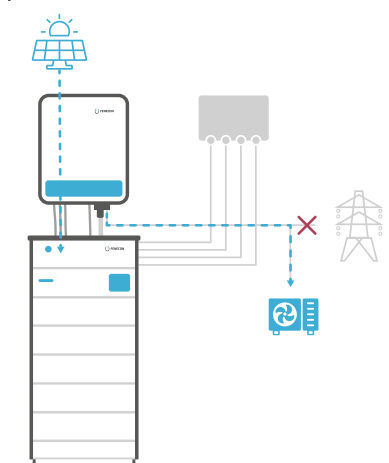
Using the FEMS App Grid-Optimized Charging will slowly charge the battery, so there is still capacity left at midday. Your PV plant continues to produce at full power to charge the battery, without being curtailed.

How our innovative system control avoids curtailment by the grid operator

Standard system



FENECON system



In traditional systems, the grid operator applies an external feed-in limitation to the inverter's AC output. Consumers are then supplied from the grid.

Unlike other systems, FENECON systems are curtailed at the grid connection point. Despite the feed-in limitation imposed, your consumers are still supplied from your PV surplus energy.



Taking the best path through winter

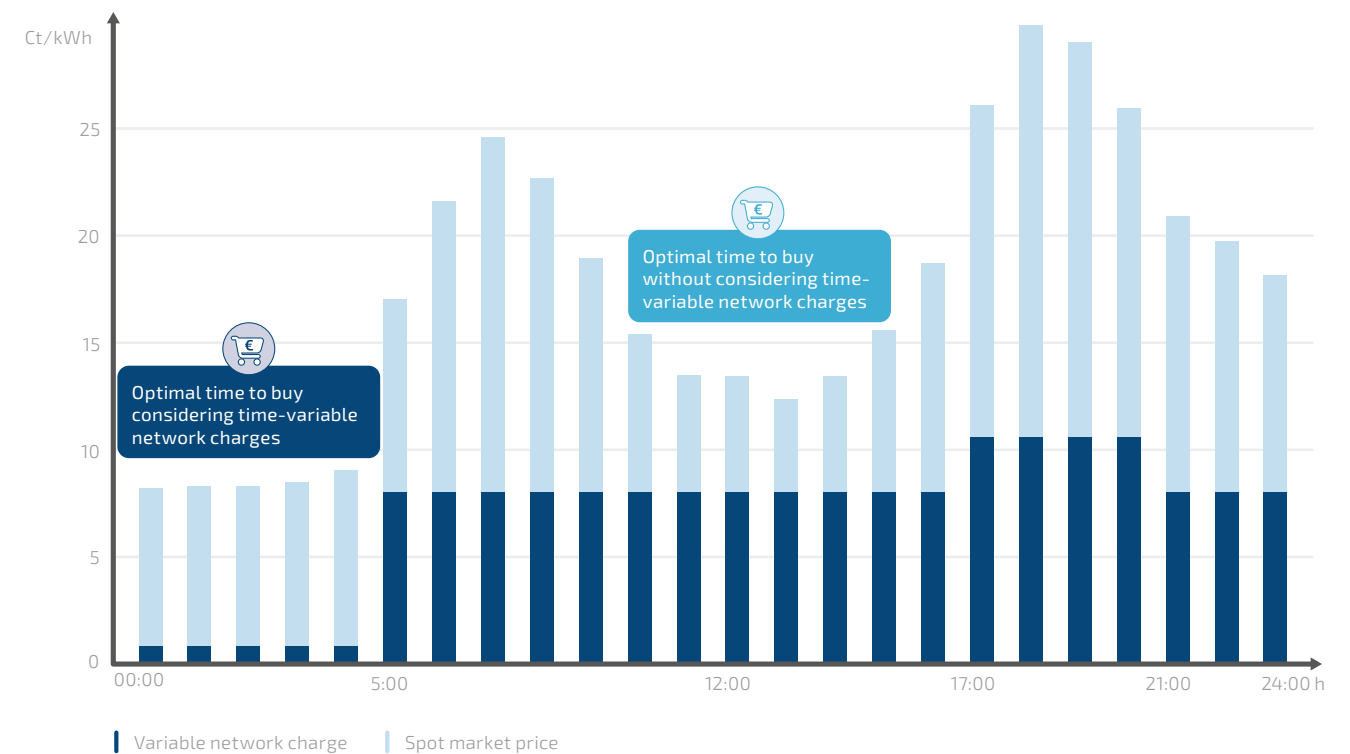
Thanks to time-of-use tariffs and time-variable grid charges

During the winter months or when the sky is overcast, "Winter Mode" takes care of smart electricity utilization and distribution. Self-consumption is prioritized here as well. However, it is supported by an intelligent strategy for buying the remaining power from the grid, taking into account time-of-use tariffs and time-variable network charges. Thanks to the FEMS App Time-Of-Use Tariff, the

system is charged with power from the grid when prices are especially low, controlled by Artificial Intelligence. You save money on the power bought and your consumers are still supplied optimally. In the future, your electric car can be charged directly from the grid when prices are cheapest. The AI will automatically determine the best times for buying power and will charge your car with it.



Benefit optimally from time-of-use tariffs and time-variable network charges



Be smart and save money with time-variable network charges:

Many already harness the power of time-of-use tariffs on their Energy Journey — But now, with time-variable network charges, you can go even further. Add the time windows during which the grid charges are especially

low to your FEMS. This data is used to determine the best times to charge your electric car or power your heat pump from the grid — fully automated!

Scan the QR code to watch the YouTube video on Time-of-Use tariffs:





Home 6, 10 & 15

The smart residential energy storage

Become more independent from energy companies and high electricity prices: The FENECON Home 6, 10 & 15 is the battery storage system for your energy transition, suitable for single- and multi-family houses, adjustable to your requirements.

- Power: up to 15 kW
- Battery expandable from 8.4 kWh to 156.8 kWh
- Integrated PV connection of up to 22.5 kWp



Home 20 & 30

The high-power residential energy storage

Become more independent from energy companies and high electricity prices: The FENECON Home 20 & 30 is the battery storage system for your energy transition, suitable for single- and multi-family houses, agricultural and small businesses.

- Power: up to 30 kW
- Battery expandable from 14.0 kWh to 168 kWh
- Integrated PV connection of up to 45 kWp



Commercial 50

The economic electrical energy storage

Our new Commercial 50 offers autarky through a back-up mode and the option to integrate further energy sources, keeping your business running. Avoid blackouts, lower your energy costs and gain more independence.

- Power: up to 50 kW
- Battery expandable from 14.0 kWh to 168 kWh
- Integrate further energy sources easily
- Optional emergency power supply with back-up mode



Commercial 92

The efficient electrical energy storage

The FENECON Commercial 92 combines the advantages of Home and Industrial systems in an innovative Commercial system. It offers maximum flexibility and combines the modularity of the FENECON Home with the high capacity and efficiency of our Industrial systems. It is installable indoors thanks to its sturdy and compact design, e. g. in basements.

- Power: up to 460 kW
- System expandable from 84 kWh to 1,050 kWh
- Self-consumption optimization 2.0 with AI-optimized time-of-use tariffs
- Peak Shaving: Avoid high electricity prices and prevent a costly infrastructure expansion

About

the company

FENECON is among the leading manufacturers of electrical energy storage solutions for residential, commercial, and industrial applications. The solutions are powered by FEMS, the FENECON Energy Management System, developed in-house and based on OpenEMS. FEMS offers energy management that is optimized for both the grid and the energy transition, and it includes intelligent sector coupling in the fields of electricity, mobility, and heat.

FENECON is a highly innovative, family-owned business, founded by Franz-Josef Feilmeier in Bavaria. The team comprises of experts in the field of integrating electric




energy storage systems, e-mobility, and PV systems into a future-proof energy environment. The company is highly regarded for its expertise, flexibility, responsiveness, and reliability.




Headquartered in Iggenbach, with two additional centralized business sites in Deggendorf and Albersdorf (Vilshofen a. d. Donau), FENECON will open its first international production facility in 2025. Located in Greenville, South Carolina (USA), it will establish the important interface between unused BEV batteries and their use for BESS applications overseas.












 **> 35,000**
systems supplied







                                                            



                                                            

The 100 % Energy Transition

The future of energy is decentralized, renewable and intelligently managed — and it starts today! With FENECON systems, the FEMS energy management, and FEMS Apps we build the foundation for a flexible, independent and sustainable energy system.

Each Energy Journey is unique. Whether you are aiming to optimize your PV self-consumption, couple the sectors of mobility and heat, or integrate your system with the energy market — FENECON allows you to stay in control of your energy. No subscriptions, the freedom to choose manufacturers, and always ready for tomorrow's requirements.

Let's master the energy transition together — Efficient, economical and future-proof.

IT'S YOUR ENERGY JOURNEY!

Every journey begins with the first step.
Scan the QR code and start your Energy Journey with us!

Scan to contact us!



Our vision for the FUTURE

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