

sonnen

energy is yours

Your guide
to the future of energy.



[Getting started](#) · [All features](#) · [sonnen world](#) · [Our service](#)



*Your independence
begins today.*

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Welcome to sonnen.

My name is Christoph Ostermann, founder and CEO of sonnen, and I am delighted to welcome you to the sonnenFamily.

As the proud owner of a sonnenBatterie, you are now in a position to store your self-generated energy. Not only does this make you independent, you are now part of a revolutionary energy system, where we all face one of the greatest challenges of our time: clean and affordable energy for everyone.

You are part of a group of more than 200,000 people who no longer entrust this goal to politics or the industry alone. Together we will work on tangible solutions that can be implemented by everyone and that work towards a common goal. **House by house, city by city, country by country, we all believe it is time to take the future of our energy into our own hands.**

In our world, you are the centre of attention. By networking hundreds of thousands of homes, we have created the largest system globally that works independently from conventional fossil-fuel power plants. Now anyone can generate and store or share power with others. Linking individual sonnenBatteries results in a virtual intermediate reservoir for green electricity which relieves the grid and makes 100% renewable energy, for the first time ever, technically feasible.

Finally, on behalf of all sonnen employees and myself, I would like to thank you for standing up and actively making a change towards a self-sustainable future.

Energy is yours!

Christoph Ostermann





Getting started with your sonnenBattery.

Congratulations! Now that your sonnenBattery is installed, you have taken an important step towards a cleaner future.

The sonnenBattery will now be the heart of your energy management system at home. It will supply you with clean self-generated energy and help optimise your consumption. To ensure you use the sonnenBattery to its maximum potential we have compiled the most important information in this booklet. From the initial operation **A** and creating your sonnen account **B** to the most relevant technical information **C** + **D**.

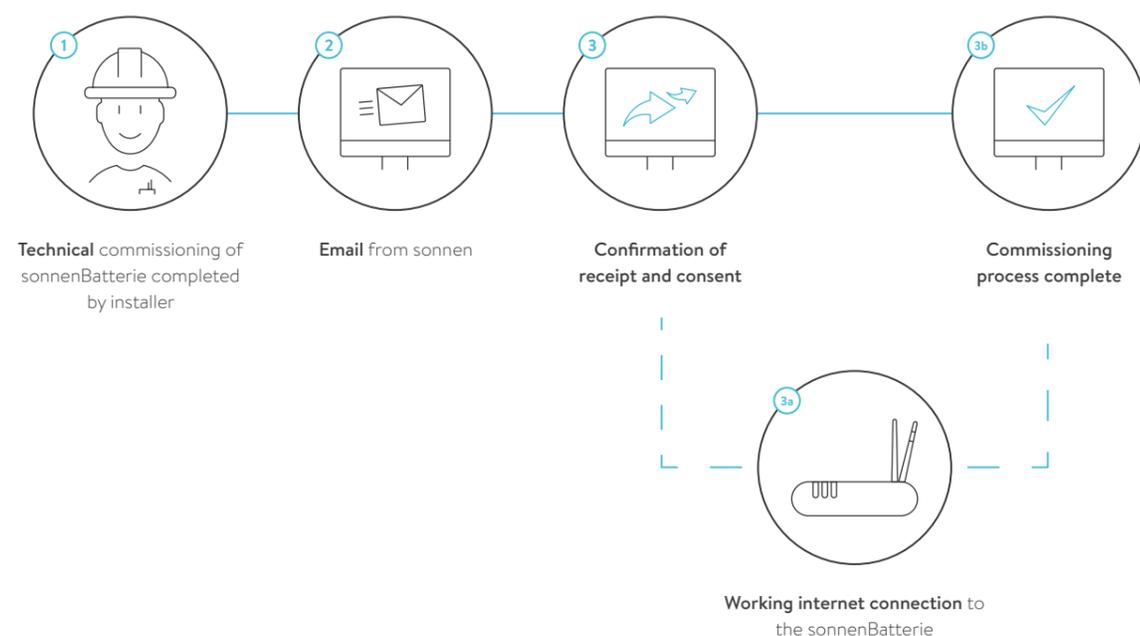
We wish you all the best with your sonnenBattery!

Commissioning – things to remember.

After ① your installer completes the commissioning of the sonnenBatterie, you will receive ② an email containing valid warranty provisions and data usage terms and conditions.

Please check that your personal information is correct, ③ confirm receipt of the warranty conditions and consent to the data usage terms and conditions.

Please note that this confirmation email can only be sent to you if your sonnenBatterie is connected to ③a the internet. If you do not have an internet connection at the time of installation, the installer will happily commission the sonnenBatterie at a later date ③b. However, do not worry, your sonnenbatterie can still be activated without an internet connection. Once your sonnenBatterie is connected to the internet it will automatically send the necessary data to the sonnen control centre.



Discover our customer portal!

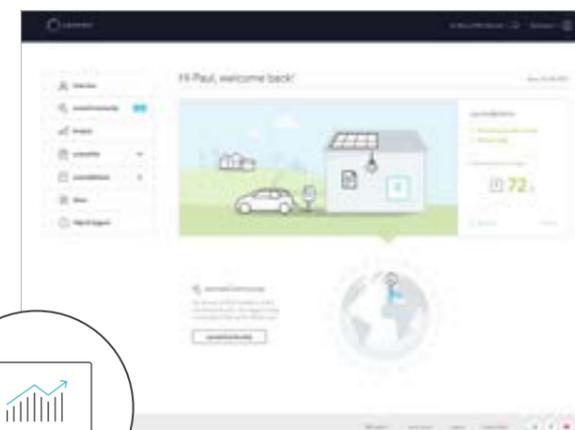
After confirming your personal data during the commissioning stage, you will automatically be forwarded to the customer portal ④.

You can find the customer portal at <https://my.sonnen.de/landing>. For first time users, simply click "Yes, I'm new here."

⑤ Simply follow the next steps and make sure the information matches the information given to us during the commissioning stage. If you have not given sonnen any personal information thus far, please use any existing e-mail you have.

my.sonnen.de/landing will be your digital companion whilst you are a sonnen customer ⑥.

Keep all information at hand via our customer portal. The portal gives you insights to your sonnenBatterie and all your energy consumption data at home.



Advantages

- Interactive and informative
- Real time data insights
- Insight into sonnenCommunity
- Developed with customers for customers

All your data in the sonnen app.

The sonnen app shows you all your energy data on the go! You can track everything on your phone, from real time data to your solar panel generation levels.

To download the app simply scan the QR code below or search for "my sonnen" on your Google Play store or App Store. Use your *my.sonnen.de* details to log-in.

Advantages

- Always at hand
- Intuitive operation
- Daily analyses and historical data
- Real time data insights
- Overview of your entire energy system



Daily Consumption Data
sonnenBatterie / daily overview of consumption and production



Monthly Overview
sonnenBatterie / monthly overview of consumption and production



Real Time Data
sonnenBatterie / live transmission of energy flows

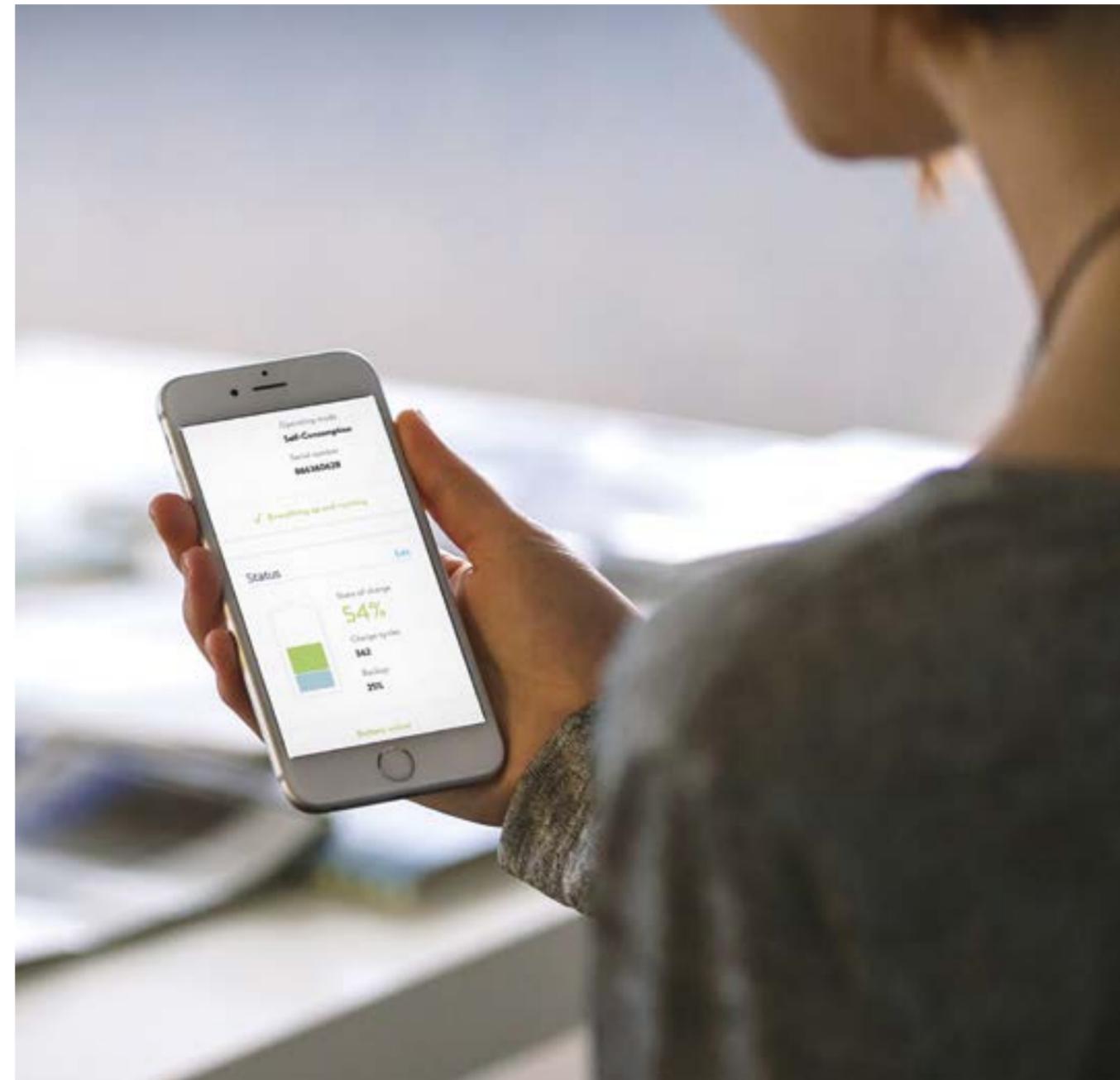
FOR ANDROID AND IOS



GET IT ON
Google Play



Download on the
App Store



Understanding the sonnen eclipse.

The sonnen eclipse acts as a status indicator for your sonnenBatterie.

The light makes it easier for you to identify if there is an issue with the battery and needs to be troubleshooted. Below is a simple guide on what the different colours mean and the first steps you can take to solving the issue.

Please note, that restarting (pg. 14) the sonnenBatterie can help.



	Colour	Mode	Operating mode
	Blue	Flashing	Normal operating mode of storage system.
	Green	Flashing	The connection to the public electricity grid is interrupted. If the connection to the grid remains interrupted, the eclipse will turn off after approx. 5 minutes. Please try restarting (pg. 14) the battery or contact the installer who installed the system. When the grid connection is restored, your sonnenBatterie will turn itself back on and will automatically connect to the internet.
	Green	Flashing	<i>In storage systems with an emergency power function only:</i> The sonnenBatterie is in emergency back-up power mode.
	Orange	Flashing	No internet connection. Make sure your internet connection is working and that the sonnenBatterie is connected correctly. If restarting the battery does not solve the issue, your installer will be able to help you further.
	Orange	Flashing	<i>In storage systems with an emergency power function only:</i> An overload has been detected. Please turn-off some devices to reduce the workload.
	Red	Constant	Problem detected: Please contact the installer who installed the storage system.

Restarting your sonnenBatterie.

If your sonnenBatterie is no longer connected to the internet, restarting the internet router can help. See the operating instructions of your router for information on how to do this. Otherwise, disconnect your router from the power supply then reconnect the power cable shortly after removing the cable.

If your sonnenBatterie is not working properly, restarting the system may help. To restart your system, simply follow the guide below.

1 Switch off the sonnenBatterie.

If you are operating your PV system via the sonnenDC Module, start at 1a. If you are operating your sonnenBatterie via an external PV inverter, start at 1b.

1a With sonnenDC Module only

Switch off the PV system using the external PV disconnecter.

1b All sonnenBatteries

1. Remove the switch cover on the control element inspection window on the right-hand side of the storage system.
 2. Press the ON/OFF switch. The switch should trip and the sonnen eclipse should go dark.
 3. Switch off the mains voltage as well using the circuit breaker (fuse) in the mains supply line (in the fuse box).
- Only then is the battery fully shut down.**

⚠ Caution!

Despite switching it off, there is still voltage in the storage system. Only authorised professionals may open the storage system! There is a risk of death through electric shock.

2 Turning the sonnenBatterie back on again.

2a All sonnenBatteries

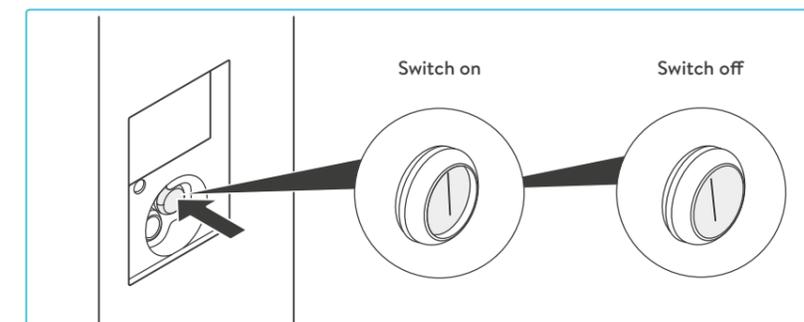
1. Switch the mains voltage on using the circuit breaker (fuse) in the mains supply line (in the fuse box).
2. Remove the switch cover on the control element inspection window.
3. Press the ON/OFF switch to turn the system on.
4. Replace the switch cover on the inspection window.

2a With sonnenDC Module only

5. Switch the external PV disconnecter back on. This switches on the PV system for the battery.

2b All sonnenBatteries

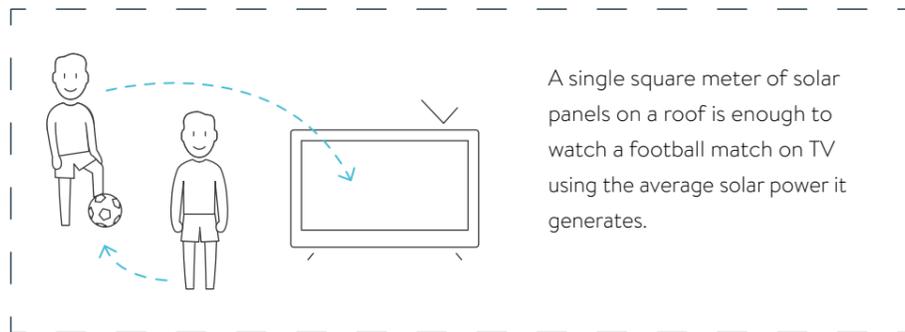
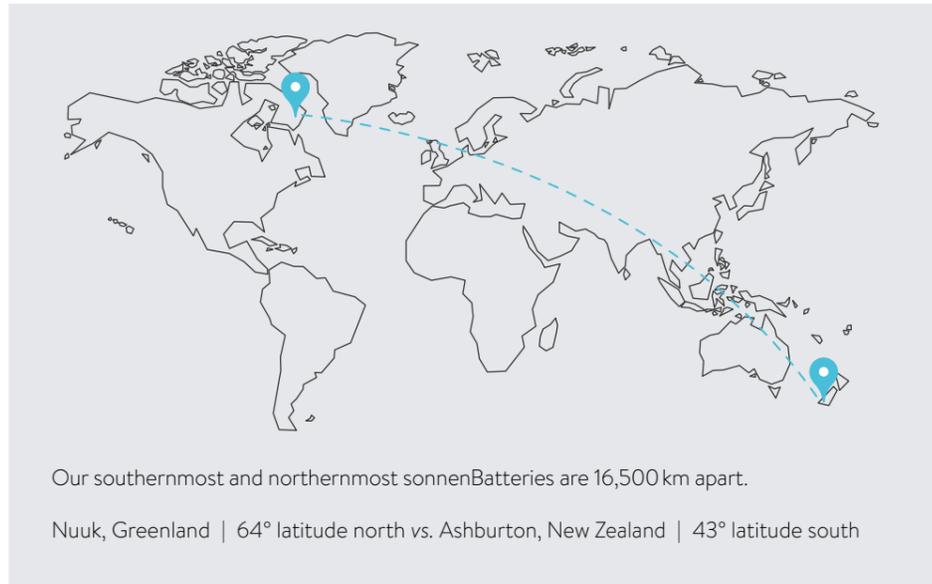
The storage system will then start up and perform a self-test. The system is ready for operation after a successful self-test.



Did you know?

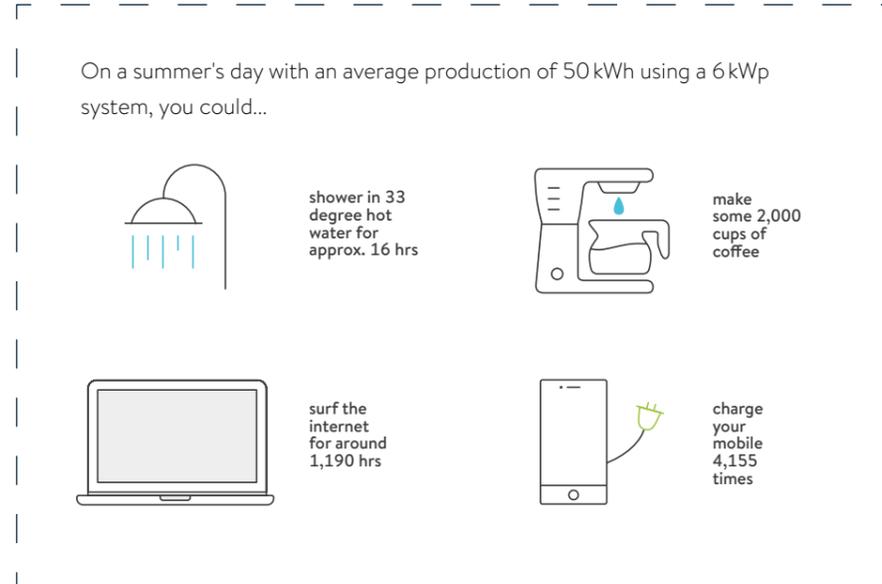
Every Briton produces around 9.1t of CO₂ per year, including travel, mobility, food and consumption. Those self-generating and using 4,500 kWh of solar power per year save approximately 2.2t of CO₂ and reduce their carbon footprint by almost 24%.

24% reduction

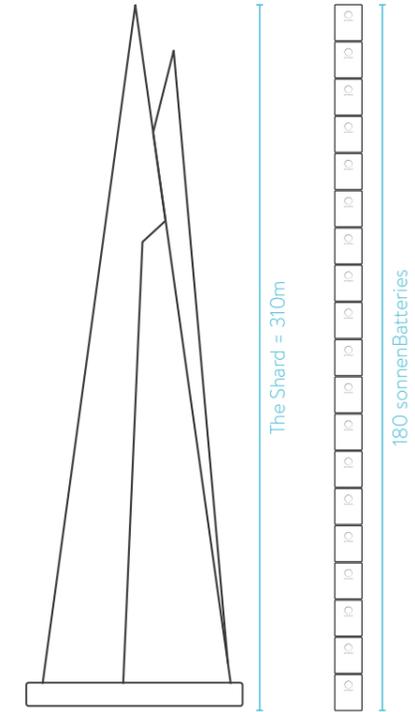


Renewable job motor: While lignite and coal employed some 33,000 people in 2017, 178,000 people were employed in wind and solar energy alone.

Available at night. With a fully charged 10 kWh sonnenBatterie, you would be able to power a night-light for your children for approx. 1,800 hours. That way, your family will never have to live in the dark!



Manufacturing a solar panel and a sonnenBatterie uses less energy than gained when using them. The energy payback time for an energy storage unit is 8 months and approx. 2.5 years for a solar panel.



If all 50,000 active sonnenBatteries were stacked on top of one another, they would be approx. 81 km tall. That's around 261 times taller than The Shard.

The amount of electricity produced by the sonnenCommunity last year saved as much CO₂ as an average car would emit driving 264 million kilometres. That is the equivalent travelling from the Earth to the Moon 686 times.

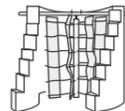
TIMELINE

Year 0



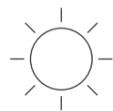
8th century BC - 7th century BC
The ancient Romans were the first to use geothermal energy to heat the floors and walls of their homes by circulating warm air.

7th century



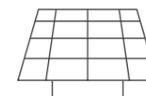
As far back as the 7th century, the Persians worked using windmills - one of the first documented uses of renewable energies.

15th century



In 1447, Leonardo Da Vinci predicted the mass use of solar energy. He was right!

19th century



The discovery of photovoltaics started in 1839 by French scientist Alexandre Edmond Becquerel. With his discovery he was the first to take steps towards an environmentally friendlier future.

20th century



In 1921 Albert Einstein received the Nobel Prize in Physics for discovering the law of the photoelectric effect.

21st century



In 2016 an Allgäu start-up created the sonnenCommunity - with the vision of making clean and affordable energy a reality for everyone. Today, sonnen is one of the global market leader of intelligent solar power storage and operator of the world's largest energy-sharing platform.



The origin of my sonnenBatterie.

Green meadows, high mountains and plenty of sunshine – here in the heart of the Allgäu lies sonnen's headquarters. More specifically, Wildpoldsried, a village with 2,600 inhabitants. Why is Wildpoldsried so unique? The community is a pioneer when it comes to renewable energies. Solar, wind and biomass produce approximately seven times more energy than the people need.

This is the perfect location for sonnen, because here, 100% clean energy is no longer a vision, it's reality. This concept is our motivator and is reflected not just in our corporate vision but also in each of our products. It is for this reason that the sonnenBatterie is designed and manufactured here – the epicenter of our future.

The sonnenBatterie is hand assembled from start to finish. Every component is thoroughly tested and before the final product leaves the factory, the battery is tested a final time to ensure it is 100% defect-free.

Wildpoldsried – this is where the world's best-selling intelligent solar power storage is manufactured. Even if you are already the proud owner of a sonnenBatterie, we wouldn't want you to miss out on the key properties and features of our product. So, let us take you on a journey to the sonnenBatterie's place of birth and tell you where the sonnenBatterie came from, what it does that is so special, and all about the various clever components concealed inside it.



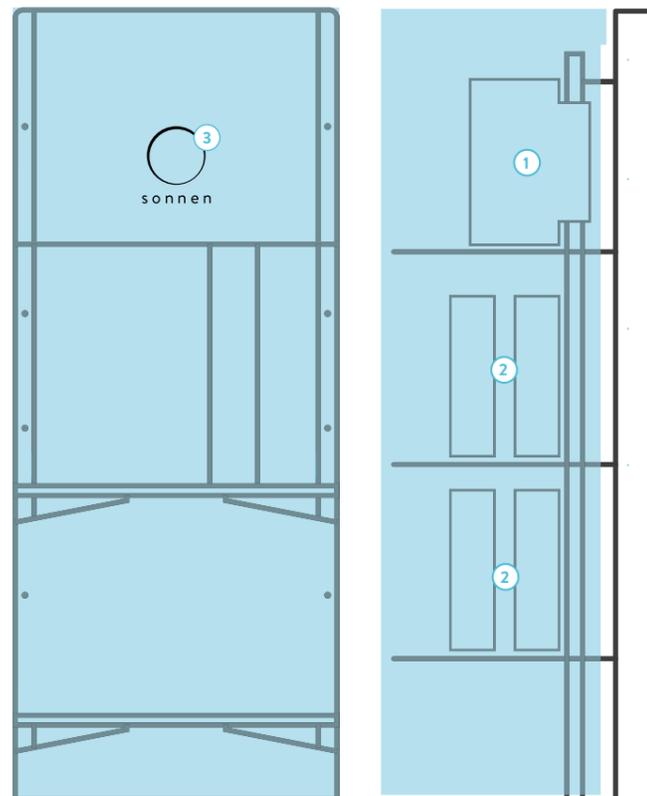
All in one system.

The **sonnenBatterie** is a fully integrated complete system. It might sound complex, but it simply means that the **sonnenBatterie** is delivered to you as one single, compact unit. In other words, it is comprised of many individual parts, from battery modules, an inverter to cables and software. All components are stored in a single housing unit.

When designing the **sonnenBatterie 10** we made sure it was an all in one system for various reasons. The main two reasons was time and simplicity. With the new system we have reduced installation time drastically with most of the work-load being done at our factory which then minimises the possibility of mistakes during an installation.

The main components of the **sonnenBatterie** at a glance:

- 1 The **sonnenPower Unit** contains inverters, software, cables and more.
- 2 **sonnenModule**
- 3 **sonnen Eclipse**



Safety.



When it comes to batteries, **safety** is a top priority for **sonnen**. Extensive testing is undergone at our factories to prevent any possible faults.

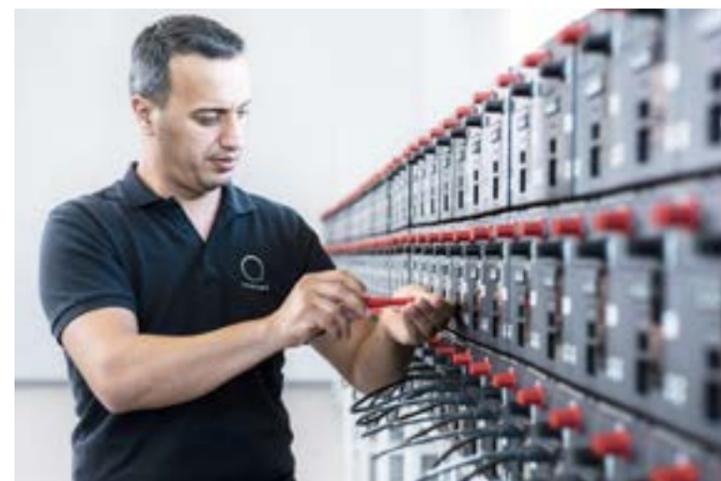
We only work with highly qualified battery providers who are subject to regular quality control. However, that alone is not enough for us. Each new battery technology is extensively tested in our battery laboratory before being put to use. Only the best batteries are used. In addition to **safety**, the batteries also need to meet our **performance** and **environmental sustainability** standards.

To better understand batteries, we test them thoroughly. We subject all potential batteries to various long-term tests, extreme load tests and the "nail-test."

Only batteries that do not explode or burn are considered further. As far as we know, all other batteries are not suitable for the **sonnenBatterie** because the well-being of you and your family is our number one priority.

Longevity and reliability also play an important role in our battery selection process. After all, solar storage is only sensible if it is sustainable and reliable.

At sonnen we use lithium iron phosphate cell batteries. In addition to being one of the safest cell technologies for home storage systems, they are also one of the most durable. The test results from our battery laboratory prove this. After all, the lithium iron phosphate cells in the **sonnenBatterie** itself still have 70% of their capacity after more than 10,000 charge cycles. Sustainability is also a matter close to our hearts, which is why heavy metals and conflict minerals such as lead and cobalt are not used in **sonnenBatteries**.



Want to find out more about some of the built-in components?

Then read on as we tell you all about our battery cells, our battery management system and our intelligent software.

Intelligence every step of the way.

The sonnenBatterie "thinks" with you. Its intelligent charging behaviour means the maximum amount of the solar power from your photovoltaic system is available to you.

And it works like this:

After a few weeks of acclimatisation, the sonnenBatterie will familiarise itself with your energy consumption patterns. Using the information, it charges at a time most suited to you. This minimises losses from your photovoltaic system, ensuring you make the best of your energy.

The smart energy management system will charge the sonnenBatterie when your household consumption is low, and instantly switch to discharging when required.



Security.

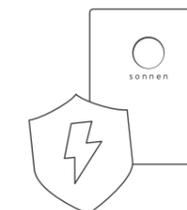
Data security is one of our top priorities.

We make sure that our security features, such as authentication and encryption, are state of the art and are continuously secured and adapted.

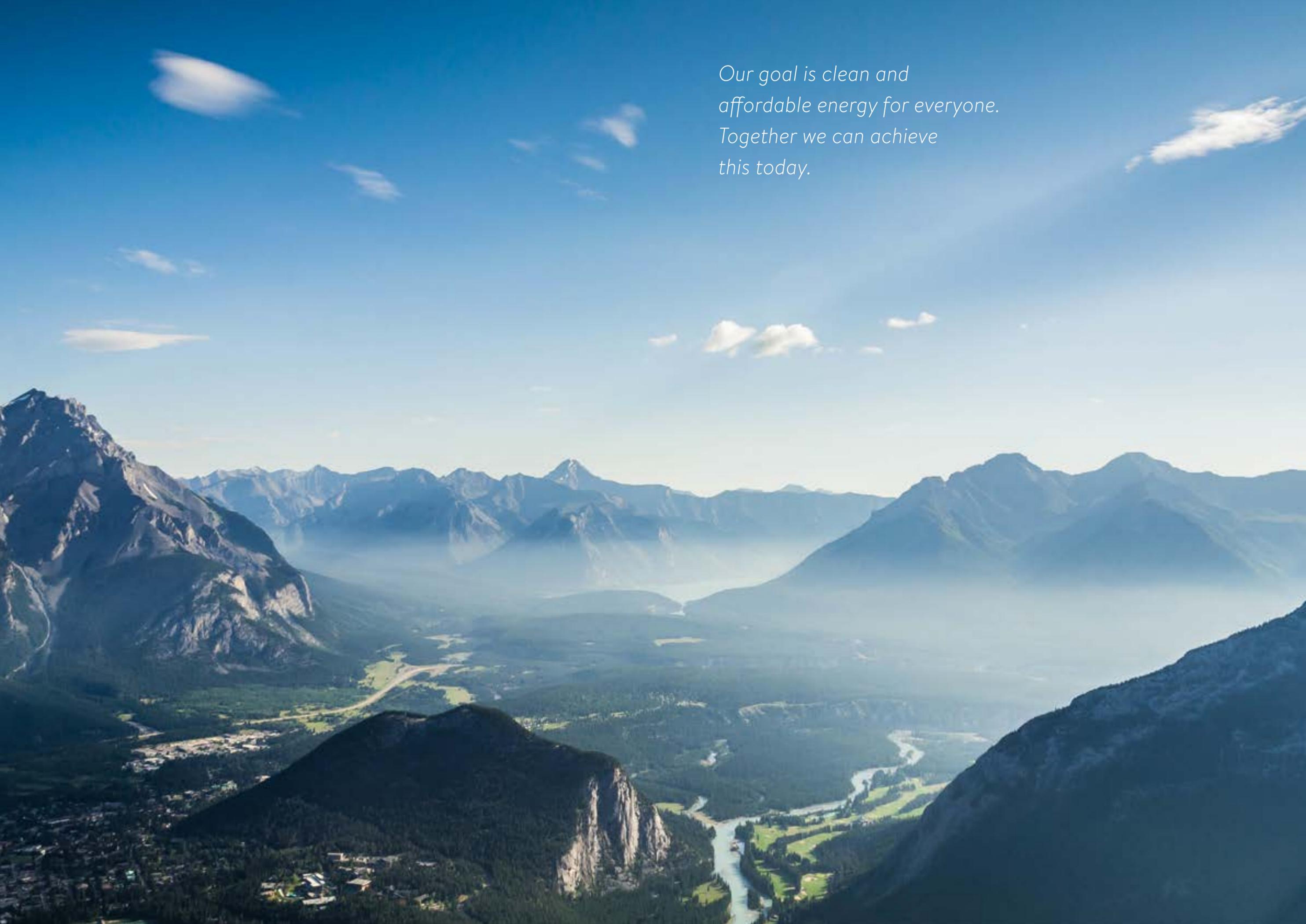
The sonnenBatterie uses encryption through a VPN tunnel to establish a secure connection with our sonnen servers, preventing any further access to the local customer network.

We also test the sonnenBatterie software repeatedly to detect and eliminate any potential problems. To ensure the safety of your information, we have both our internal company IT systems and the systems in our high-security computer centres regularly subjected to external security audits.

Access rights to these sensitive systems are managed via our internal quality management system and have restricted access.

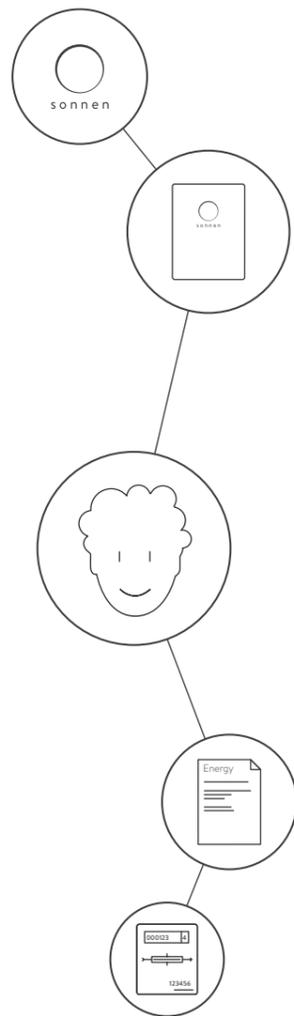


*Our goal is clean and
affordable energy for everyone.
Together we can achieve
this today.*



Simple service!

If anything is unclear and you have any questions we are happy to help further.



For questions about sonnen and our products

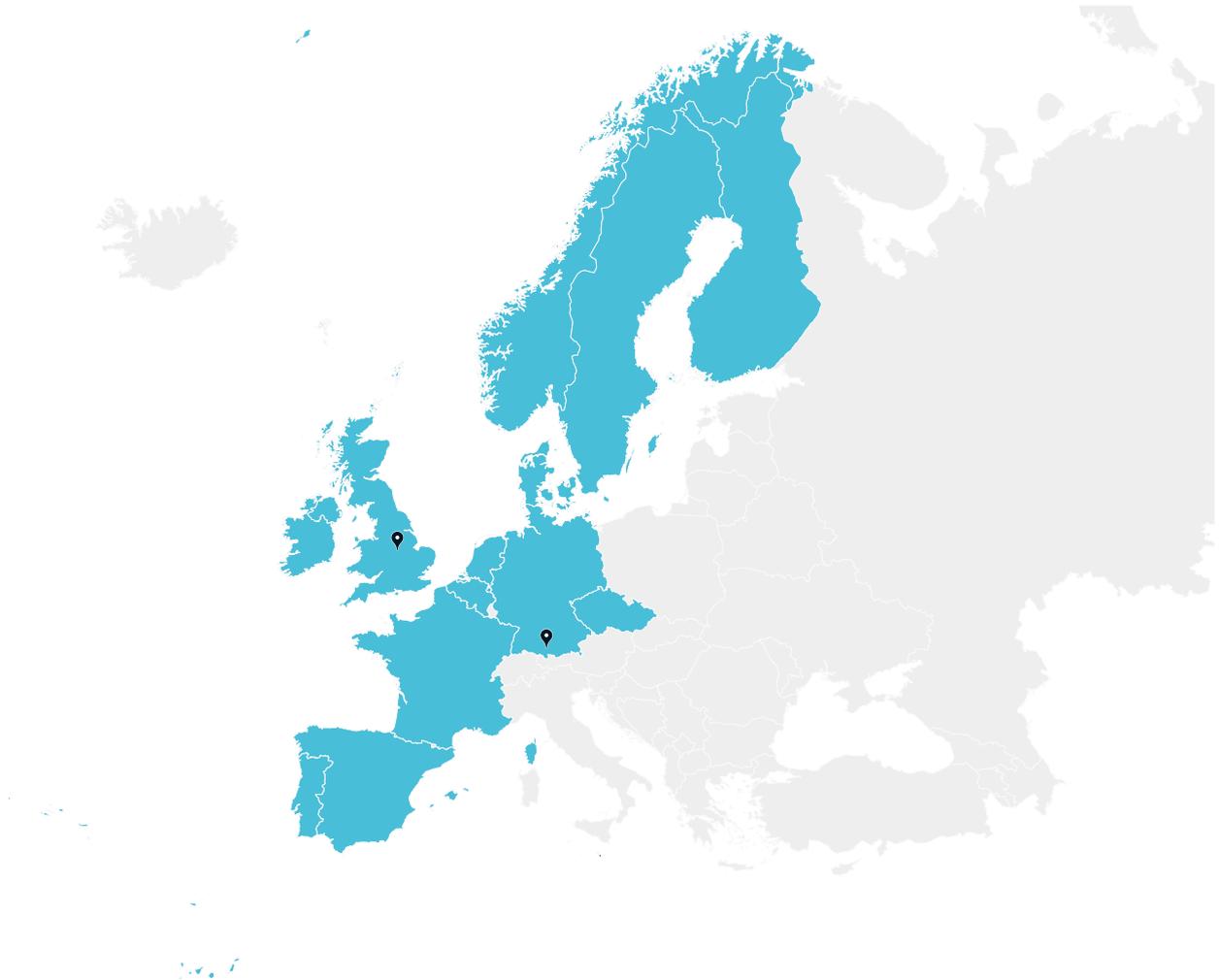
...we recommend you first take a look at our FAQs. These can be found both on our website and in your customer portal.

If you can't find the answer you are looking for, or if there is a technical issue, please contact your authorised installer directly. They will have a direct line to our service team and will contact us if any uncertainties remain.

This space is for your installer's business card.



We are here for you.



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