

Avoid grid expansion costs

Invest in a profitable battery storage system instead of a larger or a new grid connection

Background

In some cases, investments in your company's energy infrastructure will be limited by the transmission capacity of the grid. In order to connect new or larger electrical loads, you need to apply for a cost-intensive upgrade, which might take up months. The largest part of the costs will be paid by the consumer although the grid is owned by the network operator, where the added value is.

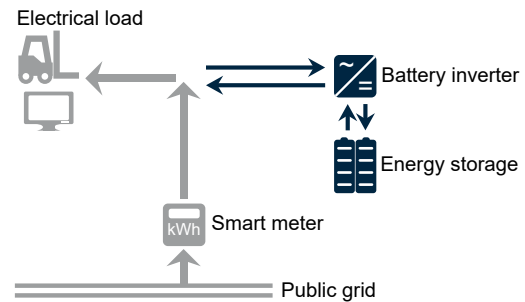
Challenges

- ✗ The company must apply for the upgrade of the grid capacity which is cost-intensive and lengthy.
- ✗ The investment is not sustainable. To supply more appliances in the future, the grid capacity might have to be expanded again.
- ✗ Following the upgrade, the increased power supply will result in higher electricity costs.



Solution

An **energy storage system** can support the grid in times of high consumption and can render an expansion of the grid capacity unnecessary.



All advantages at a glance

- ✓ No increase in network charges due to increased demand.
- ✓ Investment in a battery storage system creates additional value for your company.
- ✓ The storage capacity can be expanded in a flexible and inexpensive way at a later point of time - and nothing delays ambitious expansion plans.
- ✓ **Additional benefits available, e.g. storing solar electricity.**



Whether you install a complete new or upgrade the existing system: battery storage systems are an optimal addition to increase the value of your photovoltaic system.

Which types of companies are suitable?

The following changes can necessitate a cost-intensive grid expansion:

- transition to electric mobility
- expansion of your electric vehicle fleet
- general expansion plans
- company relocation
- expansion of machinery
- other increases in consumption
- installation of a new or larger photovoltaic system (prevention of supply peaks)

All businesses can potentially prevent grid expansion costs by investing in a battery storage system.

Battery storage systems pay off even faster by combining various uses, e.g. maximizing the share of self-consumption of generated solar power and/or as emergency power supply.

Examples

Office building

With the rise of electric mobility, a local charging infrastructure will have to be made available (e.g. for the staff or customers in an office building). **Such investments may necessitate an expensive and time-consuming grid expansion.**



Parameters:

- annual electricity consumption: 90,000 kWh
- requested power expansion: 44 kW
- cost estimate by the network operator: € 130,000
- estimated processing time: 12 months

Profitability:

- supported power: 50 kW
- total investment costs: € 100,000
- estimated processing time: 3 months
- ✓ **immediate savings: € 30,000**
- ✓ **time benefit: 9 months**
- ✓ **additional benefits available e.g. in combination with a photovoltaic system**

You could at least save € 16,000 in electricity costs annually – and this investment has paid off in only six years.

Hotel

Due to unexpected costs for the upgrade of the grid, investments in the expansion of your **capacities** (e.g. an expansion of rooms in your hotel) can get unprofitable. If you do not invest in the public grid, but in a battery storage system, you can save a lot of time and money. In addition, the value of your company will increase.



Parameters:

- annual electricity consumption: 160,000 kWh
- requested power expansion: 60 kW
- cost estimate by the network operator: € 170,000
- estimated processing time: 12 months

Profitability:

- supported power: 65 kW
- total investment costs: € 110,000
- estimated processing time: 3 months
- ✓ **immediate savings: € 60,000**
- ✓ **time benefit: 9 months**
- ✓ **additional benefits available, e.g. emergency power supply**

The convenience and security of the guests can be improved – without operational costs.

Your solar and storage partner:

Consult us – free of charge and without obligation. We are your partner for:

- » individual profitability calculation
- » detailed project planning
- » professional installation with quality components.

We are looking forward to your call!

Basis for both calculations: peak demand under two hours, changes in electricity costs due to conditional tariffs changes or changes in consumption not taken into account, ongoing costs for maintenance and insurance: 2 % of investment costs per year (not balanced)