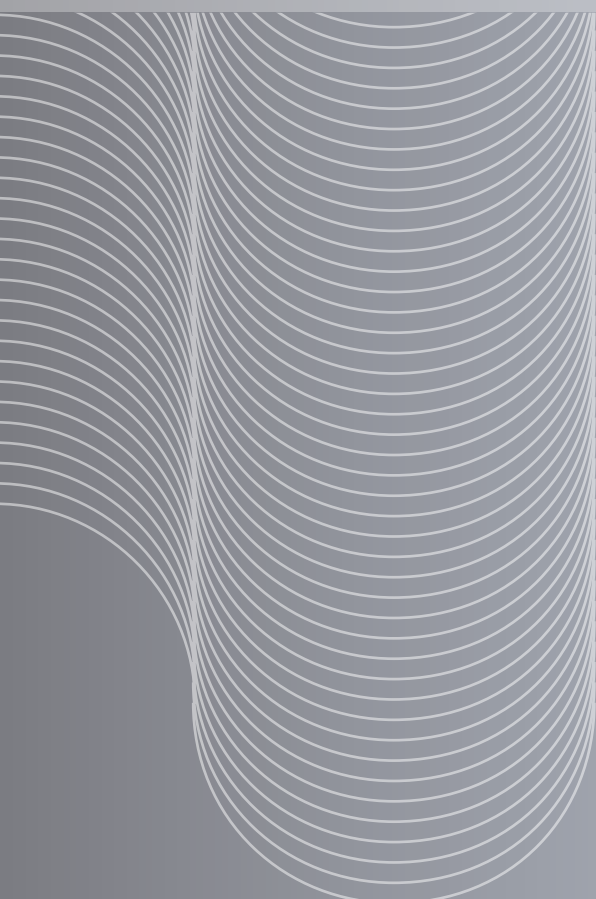




ENERCORETM
PURE ENERGY

Checklist requirements profile

for battery storage / system solution



35 Years of
Experience and Innovation

Date

Clerk

1 Customer Data

a Company / Name, first name

b Adress for location

c Contact person Contact details

Name

Phone/Mobile

E-Mail-Adress

Function / Task / Area

Who is the decision maker (s)

Battery- or System solution

Basic projekt-info

Planned Project size => 30 KW

Nbr. of planned commercial / residential units

PV area available / used m²

2 First basic info

a	What are the operators goals	Feed into the grid Self-consumption optimization	support measures Stock expansion or renewal
b	System request battery storage with	Photovoltaik power kWp	Wind power output KW/MW
c	Photovoltaik Application	On Roof Solution (Data / Drawing / Photos) In Roof Solution (Data / Drawing / Photos)	Facade Solution (Data / Drawing / Photos) open space Solution (Data / Drawing/Photos)
d	Photovoltaic planned / desired module type	Monocrystalline Photovoltaic Modules Polycrystalline Photovoltaic Modules	thin film modules / amorphous modules
e	Battery Storage cell technology	LFP – Lithium Ferric Phosphate LTO – Lithium Titanate Oxide	
f	Is uninterruptible power supply (USV) for self-supply?	Yes No	
g	Is an emergency power system planned?	Yes No	
h	Are there requirements for the protection of the storage from external influences	IP-Code: International Protection (e.g. against dust, contact and water) IK-Code: degree of shock resistance (degrees of protection provided by enclosures for electrical mechanical stresses)	

i	Are requirements for energy-saving transformers observed?	These requirements are laid down in the Eco-design Regulation EU No. 548/2014 and the Eco Design Directive 2009/125/EC.	
j	What safety precautions are required for better or to be erected transformers?	Information on safety regulations in accordance with standardization for the installation of Transformation.	
k	Is a concept for lightning and surge protection planned?	The lightning and surge protection is relevant for the safety of the storage system in case of lightning strike. Recommended is a coordinated setup with LPZ (Lightning Protection Zone) 2 for all equipment and systems inside (DIN VDE 0184).	
l	Information on security issues (access, fire protection)	Fire protection concept Fire alarm system	Requirement for extinguishing agent / system Is it necessary to carry out an acceptance and presentation of an SDS (Safety Data Sheet) required?
m	Information on PV storage topology	AC-coupled systems DC-hopped systems	PV generator-coupled systems
n	Information on important required battery storage Criteria	Fire safety Recyclability Power KW/KWh	BMS/EMS Life expectancy / number of cycles / C-rate
o	Information on battery storage-application-peripheral desire	Charging Station for car (Nbr / power) for E-Bike (Nbr/Typ) Heat supply / process heat	Water heating Surplus from hydrogen production

3 Existing- / New plants Information

a	Current / planned electric consumption p. a.	Kwh (copy / PDF Invoice)
b	load profile KW peak	Kwh (copy / PDF Invoice)
c	Current / planned oil / gas consumption p.a..	Kwh/Liter (copy / PDF Invoice)
d	Information on the performance of the machinery	Separate listing by Hall / locations
e	land register / maps available	Yes (please attach relevant documents) No
f	Architects / Planner Figures / Dates / Facts Drawings R&I schematic available?	Yes (please attach relevant documents) No

g	Are the local conditions known?	The lightning and surge protection is relevant for the safety of the storage system in the case of lightning strike. Recommended is a coordinated setup with LPZ (Lightning Protection Zone) 2 for all equipment and systems inside (DIN VDE 0184).
h	Has an application for an operating licence been applied for and the operation of the storage facility has been clarified with the network operator?	An operating permit is required for the operation of a storage facility, depending on the operating mode of a battery storage system, an operating permit is required for the operation of a storage system.
i	What does the transfer / connection point for the voltage look like?	Here, the requirements of the distribution system operator (VNB) apply in accordance with the TAB as well as the current BDEW Directive.
j	Is it possible to connect to the supply network?	The connection to the supply network is necessary so that the storage system can feed into it, for example. Aspects such as cable design and available mains short-circuit power are important here. In this case, you should contact the local network operator in good time.
k	Is a meter measurement required for the operation of the storage tank? If so, what kind?	For the provision of system services (e.g. balancing energy, Peak Shaving...) is a RLM counter (registered power measurement) necessary. Also, from a consumption of approx. 120,000 kWh / year, RLM meters are usually built, which record every 15 minutes such as consumption, power and blind work.
l	Will an auxiliary voltage need supply?	An auxiliary power supply is generally recommended for the connection of the storage systems, e.g. to ensure a power supply during maintenance work.
		Yes No
m	Is a communication connection required, e.g. to a control station, to the DSO or for remote processing? If so, how must it be executed, secured etc.?	According to TAB Medium Voltage 2008, the distribution system operator (DSO) writes a communication connection between the generation plant and the control system at medium-voltage level.
		Have the details been clarified with the local DSO? Yes (please attach relevant documents) No

Please note the following notes on order processing, but first in principle: The questions and comments in these questionnaires refer to the technical rules, guidelines or industry standards (DIN) in Germany. For other countries other regulations and / or standards may be valid, for this your data and information are essential.

Here are the our following notes for instructions of a order processing:

- 1.) Please return the completed questionnaire to us (if possible, with the requested attachments). Please try to include all conceivable consumers, as this is the only way we can make a non-binding calculation of the ESS performance. In usually it is necessary to develop an individual software for an energy management system (EMS).
- 2.) We will make a (non-binding) **rough conception** free of charge after evaluation of your information / data.
- 3.) If the request becomes more concrete and extensive planning/calculations on the part of the inquirer by Enercore are desired or necessary, we will specify and communicate the (approximate) costs incurred. The costs for individual ESS etc. will be invoiced prior to the start of planning / preparation.
- 4.) After receipt of payment, Enercore will promptly prepare / design the ESS. On the basis of the information available to us, the design planning and our non-binding offer will be made.
- 5.) After placing the order with Enercore, acceptance of the order and delivery by Enercore as well as successful calculation of the ESS etc. (see our General Terms and Conditions in the download area), **we will credit the planning costs paid by the customer with the last progress bill.**
- 6.) Any additional services or subsequently submitted information / data / requests / requirements, which should arise during or after the planning phase, can lead to higher planning costs on the part of Enercore. We will communicate this in due time and, if necessary, charge for it.

We would like to thank you for your cooperation.
Your information would be treated with absolute confidentiality.

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IN
GERMANY

Subject to technical changes, errors and misprints.



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