We can design and plan networks, cables, transformers, sub-stations and power plants of wind and solar projects using both technical and economic criteria.
If you have requirements for reactive power / voltage control we can come up with a range of options and dimension the equipment appropriately for you. If harmonics can be an issue, we can determine the extent of the problem and dimension any required filter unit so that the relevant regulations can be met. Where system operators require grid code compliance testing we can act as your engineer and ensure that the tests are recorded, performed properly, and will not cause damage to plant or personnel. To plan your installation, we apply modern standard software. Based on a detailed model of your system, we can identify potential problems early and resolve at an early planning stage.

Our core competencies are:

- Studies to verify the suitability of assigned point of connection
- Design and planning of cable networks
- Planning of sub-stations (medium and high voltage)
- Design and planning of reactive power compensation equipment
- Harmonic analysis and filter design & testing
- Protection selectivity, protection checking and testing
- Grid code compliance testing
- Planning in accordance with the relevant guidelines especially
    - VDE 4110/4120 Directive
    - TABs of network operators
    - Transmission & distribution codes
    - Connection rules of the TSO
    - FGW TR3, TR4 and TR8

An extract of our solar projects is shown in the following table:

Project	Year	Country	P_{Inst} [MW]	Comment
PV project Deponie 1 Jänschwalde	2025	Germany	23,1	Reactive power calculation
PV project Borhau 1.BA	2025	Germany	26	Reactive power calculation (PV + Windfarm)
PV project Neuwiesen	2025	Germany	8,4	Cable sizing, reactive power, loss calculation
Floating PV Cottbuser Ostsee	2025	Germany	22,5	Reactive power calculation (PV + Windfarm)
PV project Sinzing	2025	Germany	11	Basic and detailed planning
PV project Wernberg	2025	Germany	8,6	Basic and detailed planning, certification
PV project Ihrlerstein	2025	Germany	14,8	Basic and detailed planning
PV project Dietfurt	2025	Germany	10,9	Basic and detailed planning
PV project Langer Berge	2024	Germany	26,0	Cable design, reactive power and loss assessment, power quality
PV project Birkhof	2024	Germany	9,5	Basic and detailed planning for a solar farm integrated into an existing wind farm network
PV project Winterberg	2024	Germany	5,5	Basic and detailed planning for a solar farm integrated into an existing wind farm network
PV project Wackersdorf	2024	Germany	3,0	Basic and detailed planning, support at assignment and commissioning
PV project Barbing	2023	Germany	4,5	Basic and detailed planning, support at assignment and commissioning
PV project Kirchenthumbach	2023	Germany	63,1	Basic and detailed planning, support at assignment and commissioning, substation planning
PV project Heßdorf	2023	Germany	42,9	Feasibility study, evaluation for different voltage levels
PV project Alteglofsheim	2023	Germany	4,5	Basic and detailed planning, support at assignment and commissioning
PV project Hambach	2022	Germany	72,9	Planning of internal mv-substation
PV project Laubst	2022	Germany	44,9	Ampacity calculation
PV project Jackerath	2022	Germany	10,4	Planning of internal mv-substation

PV project Sulzkirchen	2022	Germany	24	Basic and detailed planning, support at assignment and commissioning
PV project Speichersdorf	2022	Germany	18,9	Basic and detailed planning, support at assignment and commissioning
PV project Schnabelwaid	2022	Germany	6,5	Basic and detailed planning, support at assignment and commissioning
PV project Neu-Ulm	2022	Germany	0,4	Correction factor for reactive power allocation
PV project Wittlich	2022	Germany	1,9	Grid connection concept
PV project Eddelak	2021	Germany	10	Basic and detailed planning, support at assignment and commissioning
PV project Lärz	2021	Germany	< 50	Cable design, electrical loss calculation with storage considered, park control design
PV project Hemau-Hagetshof	2021	Germany	15	Cable design, reactive power assessment, verification of protection settings
PV project Spielberg / Streitberg	2021	Germany	8,6	Control and metering concept
PV project Nellingen	2020	Germany	6,3	Assessment of harmonics
PV project Delphinus	2020	Germany	29	Electrical loss study depending on reactive power
PV project Großhabersdorf	2020	Germany	1,9	Evaluation of arc damage
PV project Rottenbach II	2019	Germany	9,3	Cable design, consulting concerning choice of inverters in order to fulfil reactive power requirements
PV project Schmidgaden	2018	Deutschland	0,7	Awarding of a sub-station’s contract
PV project Hiowe Mahe-Shai	2018	Ghana	20	Consulting services, PPA review
PV project Don Rodrigo	2018	Spain	135	Cable design, short circuit calculations
PV project Lough Road Cluster	2016	UK	23	Electrical design verification, Harmonic studies according to G5/4, Transformer energisation and flicker
PV project Meuro	2016	Germany	70	Electrical loss calculation