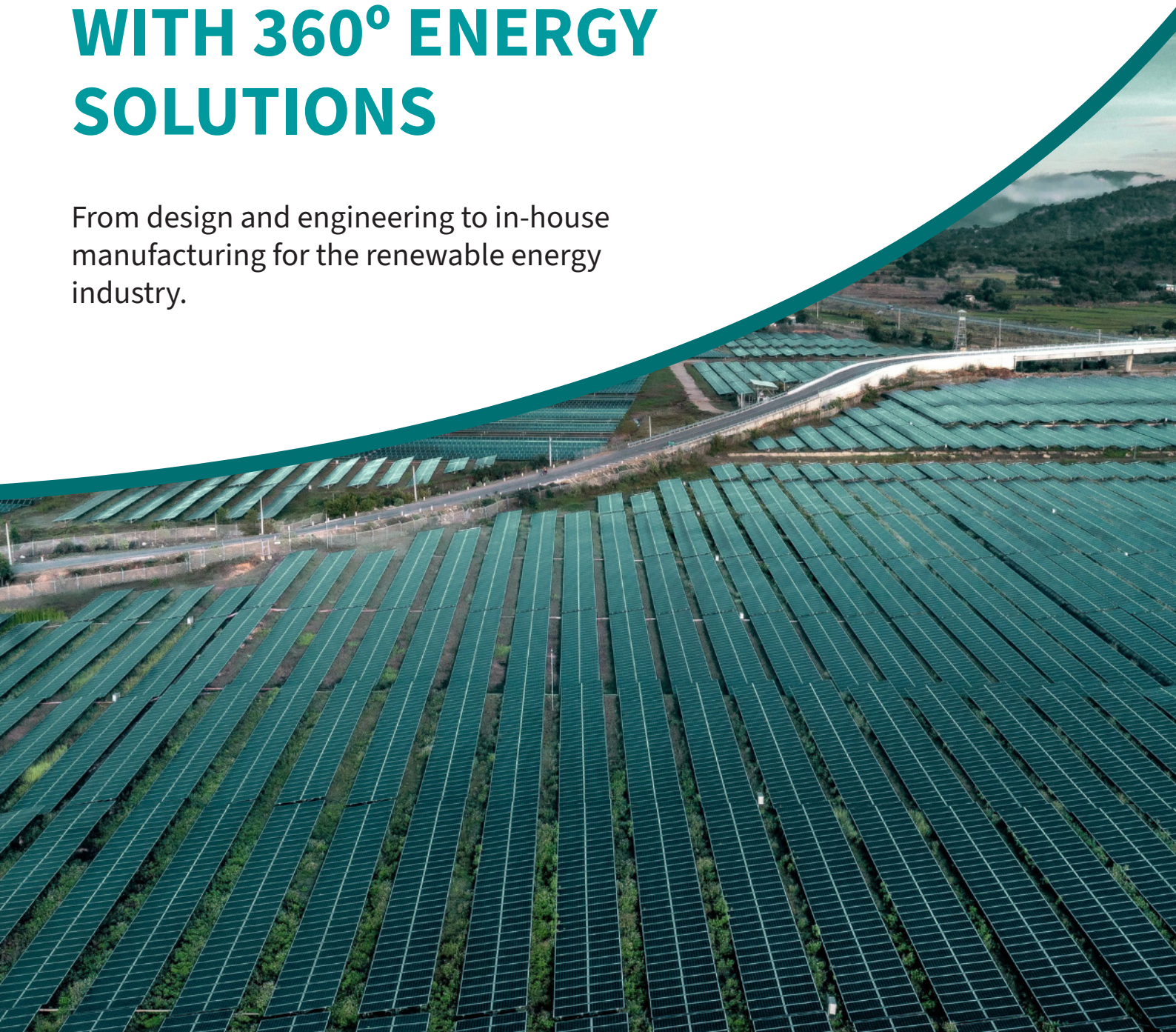
mtech
group

POWERING THE FUTURE

WITH 360° ENERGY SOLUTIONS

From design and engineering to in-house manufacturing for the renewable energy industry.

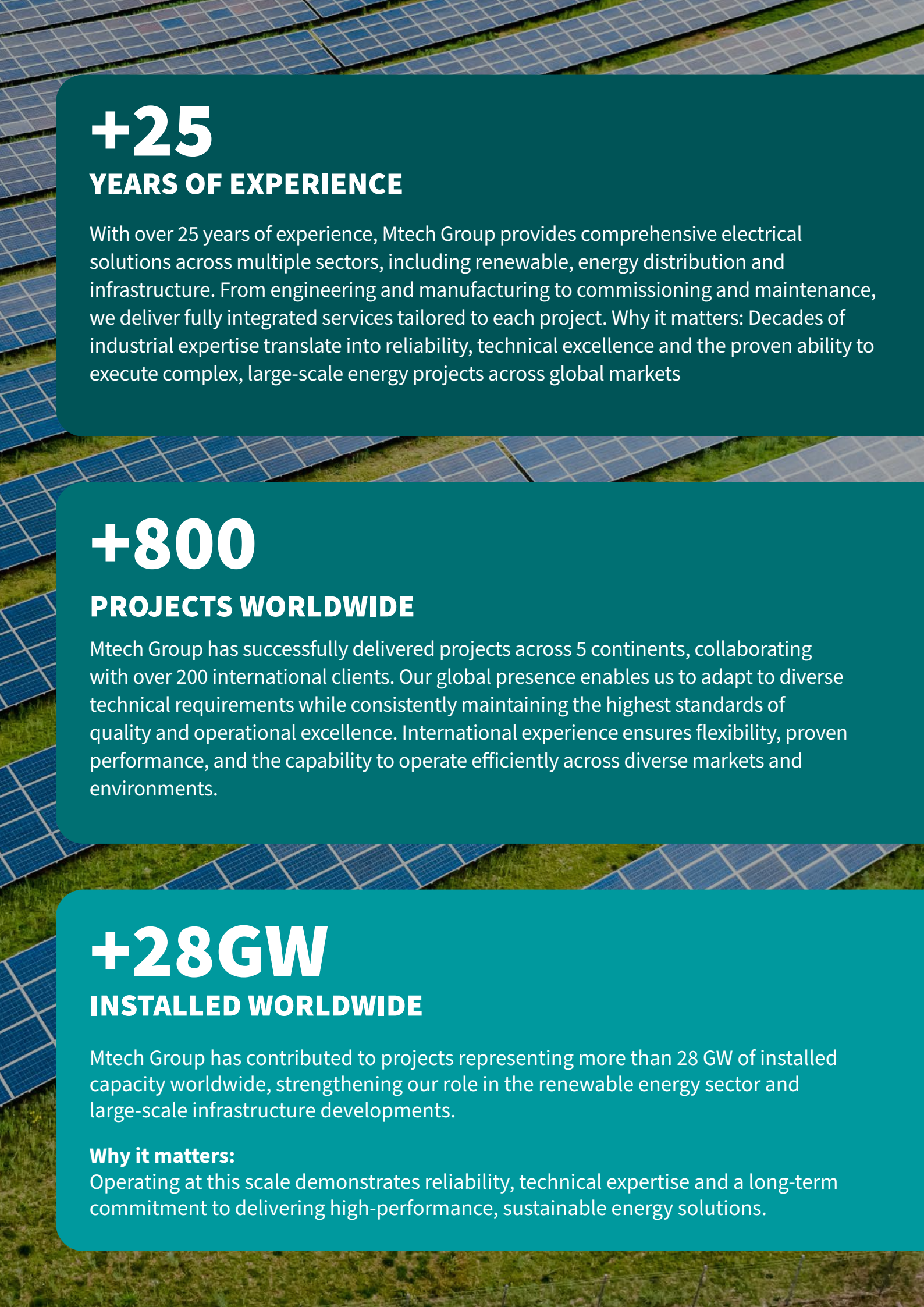




ENERGY SOLUTIONS ARE NOT JUST DELIVERED

THEY ARE DESIGNED, ENGINEERED AND MANUFACTURED TO PERFORM

At Mtech Group, with **more than 25 years of experience**, we transform energy into integrated solutions through design, engineering and in-house manufacturing. Our industrial expertise and strong commitment to innovation enable us to develop advanced electrical systems for the renewable energy sector, delivering the highest standards of quality, efficiency, reliability and performance.



+25
YEARS OF EXPERIENCE

With over 25 years of experience, Mtech Group provides comprehensive electrical solutions across multiple sectors, including renewable, energy distribution and infrastructure. From engineering and manufacturing to commissioning and maintenance, we deliver fully integrated services tailored to each project. Why it matters: Decades of industrial expertise translate into reliability, technical excellence and the proven ability to execute complex, large-scale energy projects across global markets

+800
PROJECTS WORLDWIDE

Mtech Group has successfully delivered projects across 5 continents, collaborating with over 200 international clients. Our global presence enables us to adapt to diverse technical requirements while consistently maintaining the highest standards of quality and operational excellence. International experience ensures flexibility, proven performance, and the capability to operate efficiently across diverse markets and environments.

+28GW
INSTALLED WORLDWIDE

Mtech Group has contributed to projects representing more than 28 GW of installed capacity worldwide, strengthening our role in the renewable energy sector and large-scale infrastructure developments.

Why it matters:
Operating at this scale demonstrates reliability, technical expertise and a long-term commitment to delivering high-performance, sustainable energy solutions.

OUR ENERGY TODAY: WHAT DEFINES US



16.500 m²
TOTAL FACTORY SPACE

400
FTE

50
ENGINEERS ON STAFF

+

350
FTE

+65%
EXPORTED PRODUCTION

OUR FACILITIES

15.500 m²

MADRID
- HQ Office
- Factory in Pinto

1.500 m²

BILBAO
- Office
- Factory in Zamudio

VALENCIA
- Comercial Office

AUSTRALIA
- Comercial Office

OUR PRODUCTION

2300
Annual electrical panels

2250m³
Storage capacity

1730
Pallet storage capacity

10
Autonomous production units

2
Overhead cranes 10 & 43 TN

OUR CAPABILITIES

ENGINEERING CAPABILITIES

TOOLS USED

- AutoCAD
- EPLAN
- SolidWorks
- Lantek

ENGINEERING DISCIPLINES

- Electrical Engineering
- Mechanical Engineering
- Civil Engineering

MANUFACTURING CAPABILITIES

MACHINING

CNC centers for polyester and polycarbonate

WIRING

Automatic machinery (Komax Z650) and semi-automatic equipment

SHEET METAL PROCESSING

- Punching
- Bending
- Welding and Laser Cutting

IN HOUSE METAL FABRICATION

Full control of the production process ensuring quality and flexibility

INVERTER MANUFACTURING

Full traceability and quality control.

OUR PRODUCTION

QUALITY CONTROL

- Non conformity system
- Effective response to issues

PRODUCTIVITY CONTROL

Real-time monitoring

LOGISTICS MODELS

- Optimized logistics
- Efficient material management

HIGHLY QUALIFIED TEAM

Professionals with extensive experience, innovation, efficiency and execution focus

VALUE FOR THE COSTUMER

- REDUCED CAPEX & OPEX
- SHORTER PROJECTS SCHEDULES
- LESS SITE RISK
- HIGH RELIABILITY
- FLEXIBLE DESIGN

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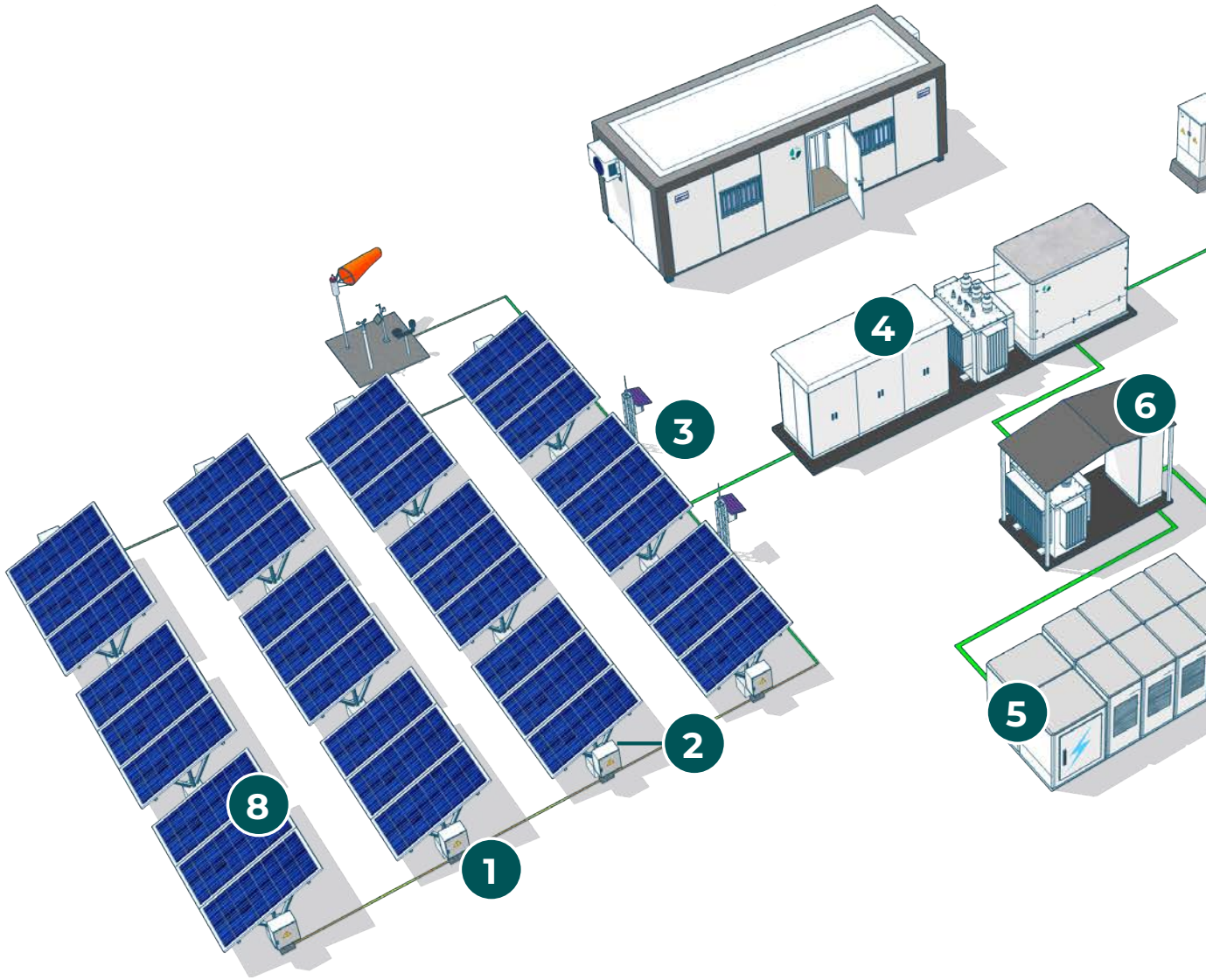
360º SOLUTIONS
FOR THE RENEWABLE SECTOR

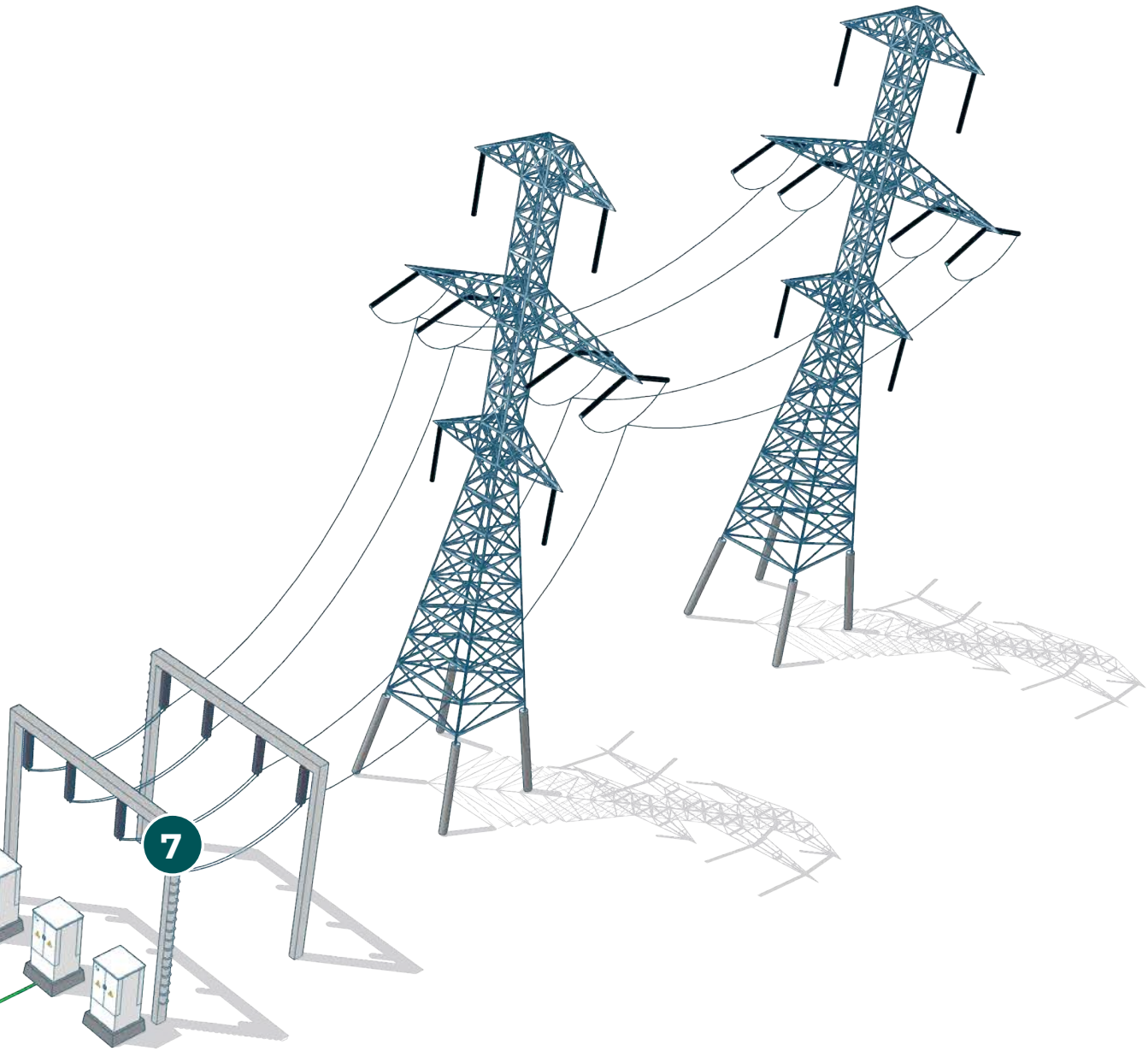
The products we offer have helped to bring the most complex projects in the sector to life

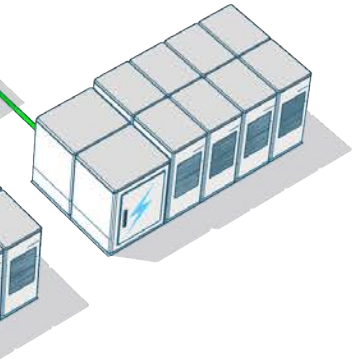
+600
PROJECTS COMPLETED

+400K
PRODUCTION HOURS PER YEAR

+28GW
IN INSTALLED PROJECTS







Our solutions

1. String Boxes (with and without monitoring)
2. Tracker Control
3. Communication Infrastructures
4. Inverters and Electrical Panels for Power Stations
5. BESS (Battery Energy Storage Systems)
6. SKID AASS
7. Substation Engineering
8. Manufacturing of Substation Panels

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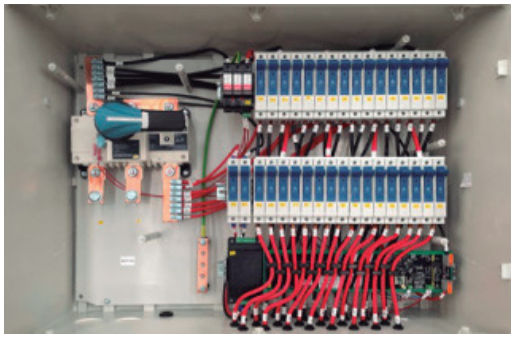
STRING COMBINER BOX CUSTOMIZED FOR YOU





SCBs are designed to combine and protect the energy produced by PV plants. At MTECH, we provide solutions in accordance with the needs of the customer.

We carry out an ad hoc design for each project, guaranteeing functionality and quality in compact, easy-to-install designs.

Generalities	
Voltage	1000V DC and 1500 DC
Strings	2 - 32 strings

Enclosures	
Format	Portrait and Landscape
Optional	Support system for pile
Material	Fiberglass-reinforced polyester Fire resistant (960°C IEC 62208)
Dimensions	Standardized according to manufacturer. Selected based on the space requirements of each project (75, 86, 108, etc.)
IP protection code (solids and liquids)	Up to IP66 IC 60529
IK protection code (mechanical impacts)	Up to IK10 IEC 62262
Operating temperaturae	Between -25° and 70°C (with fuse and power supply de-rating beginning at 40°).

Monitor (optional)	
Maximum current per string	15 - 40 A, depending on the specific model. Determines the monitoring capacity, single or double.
Type	Shunt or Hall
Monitor type	Single or Double
Measurements	Amperage, Voltage and Temperature
Optional	Disconnector and Surge Protection status
Communication	RS485 MODBUS /Wireless (Lora) / Fiber-optic
Maximum no. of strings	32 Max, depending on the specific model.

Disconnector Switch	
Amperage	400A - 630A
Number of poles	2- 4, depends on the selected disconnector
Breaking capacity	10 kA
Rated impulse withstand voltage	12 kA
Optional	Auxiliary contact

Surge Protection	
Type	I or I + II
Optional	Auxiliary contact
Nominal discharge current	20 kA
Maximum discharge current	40 kA
Protection Level (+/-/ PE)	4.8 kV - 5 kV

Protection Devices (Fuse Holders)

Available sizes: 10 × 38, 10 × 85, 14 × 51, 22 × 58 NH

Nominal voltage:
1000V - 1500V DC

Fuses:
2A - 100A

Breaking capacity:
6 - 40 kA

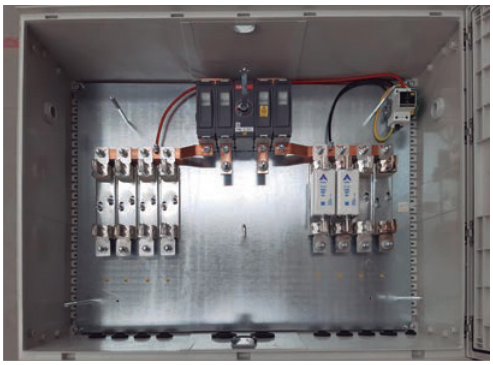
LED lighting:
With/Without, to display functioning.

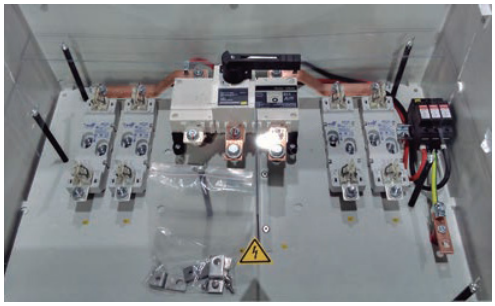
Power source / Different power source options are available:
- DC-DC self-generating power source: 1000V DC to 24V DC and 1,500V DC to 24V DC.
- Power source with independent 230V AC or 127V AC line.
- Independent 24V DC continuous line.

Others:
String input: Cable glands, Fittings or MC 4 connectors.
Wire: Solar cable with up to 1800V DC insulation
Grounding: Screw, flat wire, terminal. etc

Passive protection systems:
- IP55 aerators or IP66 pressure compensators.
- IP20 protective polycarbonate for preventing direct contact between active parts.

JUNCTION DC BOX TRUNK SOLUTIONS





Junction DC Box are designed for the bundling of BUS cables, which in turn, group together the strings located along the length of a photovoltaic park upstream.

It also allows the protection of these cables and the opening of the circuit for maintenance operations.

Generalities	
Voltage	1000V DC and 1500 DC
Strings	1 - 6 inputs (each input combine several strings)

Enclosures	
Format	Portrait and Landscape
Optional	Support system for pile
Material	Fiberglass-reinforced polyester Fire resistant (960°C IEC 62208)
Dimensions	Standardized according to manufacturer. Selected based on the space requirements of each project (75, 86, 108, etc.)
IP protection code (solids and liquids)	Up to IP66 IC 60529
IK protection code (mechanical impacts)	Up to IK10 IEC 62262
Operating temperaturae	Between -25° and 70°C (with fuse and power supply de-rating beginning at 40°).

Monitor (optional)	
Maximum current per string	400A Max, depending on the specific model
Type	Hall
Monitor type	Single
Measurements	Amperage, Voltage and Temperature
Optional	Disconnector and Surge Protection status
Communication	RS485 MODBUS /Wireless (Lora) / Fiber-optic
Maximum no. of strings	6 Max, depending on the specific model.

Disconnector Switch	
Amperage	400A - 630A
Number of poles	2, 3 or 4. Depending on the selected disconnector.
Breaking capacity	10 kA
Rated impulse withstand voltage	12 kA
Optional	Auxiliary contact

Surge Protection	
Type	I or I + II
Optional	Auxiliary contact
Nominal discharge current	20 kA
Maximum discharge current	40 kA
Protection Level (+/-/ PE)	4.8 kV - 5 kV

Protection Devices (Fuse Holders)

Available sizes: 10 × 38, 10 × 85, 14 × 51, 22 × 58 NH

Nominal voltage:
1000V - 1500V DC

Rated Current:
802A - 100A

Breaking capacity:
6 - 40 kA

Power source / Different power source options are available:
• DC-DC self-generating power source: 1000V DC to 24V DC and 1,500V DC to 24V DC.
Power source with independent 230V AC or 127V AC line.
• Independent 24V DC continuous line.

Others:
Wire: Solar cable with up to 1800V DC insulation
Grounding: Screw, flat wire, terminal. etc

Passive protection systems:
• IP55 aerators or IP66 pressure compensators.
• IP20 protective polycarbonate for preventing direct contact between active parts.

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OTHER SOLUTIONS

Discover our complementary solutions designed to enhance the performance, safety, and efficiency of your electrical systems.

Tailored to current market needs, we offer reliable technology compatible with leading manufacturers.

1 INTEGRATION SERVICES

We deliver fully integrated power solutions, from design through to delivery. By combining in-house engineering with proven industrial capacity, we supply turnkey skids, switching substations and power stations, fully assembled, wired and factory-tested at our own facilities.

Integration Capabilities

What We Integrate?
- BESS Auxiliary Transformer Skids
- Power Stations for OEMs
- MV Switching Substations

Track Record
300+ integrations since 2024

Engineering
- 50 in-house engineers
- Design, development and documentation

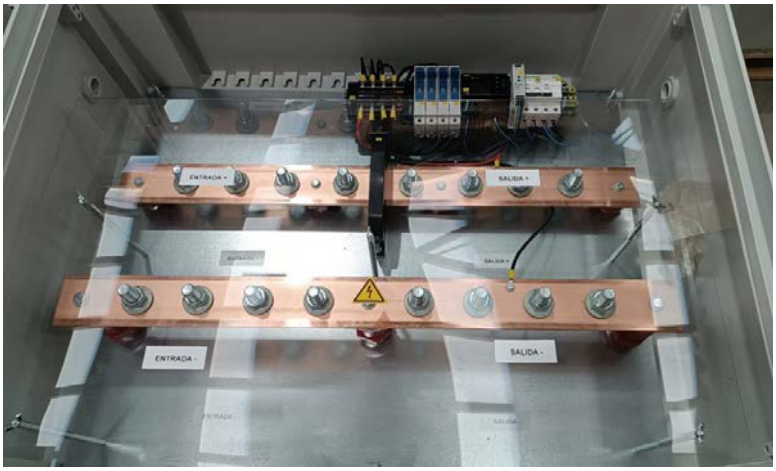
Manufacturing Capacity
2 overhead cranes
(10 t and 43 t)

Quality & Compliance
- ISO 9001 / ISO 14001
- UL 1741 and UL 508A
- Factory Acceptance Testing (FAT) prior to delivery



2 BESS MONITORING BOX

The BESS Monitoring Box integrates a SATEC PRO Series analyzer that monitors the real current flow during battery charging and discharging. This enables you to validate the measurements reported by the battery OEM and to identify any discrepancies between actual and expected performance across charging cycles.



3 Battery Energy Storage System (BESS)

Is a technology developed to store electrical charge through the use of specially developed batteries. The underlying idea is that such stored energy can be used at a later time.

An enormous amount of research has led to advances in batteries that have shaped the concept of the Battery Energy Storage System into a commercial reality.

The different cabinets used to carry out this system have been the following:



Cabinet type



Control cabinet



Battery Connection Panel

4 Auxiliary Services Cabinets (substations)

These panels are used to supply the equipment installed in the substation, both non-essential supplies and essential supplies.





5 Protection cabinets (substations)

These cabinets are used to protect substation equipment on High Voltage (HV) lines.

Within the electrical cabinets and panels manufactured by MTECH, Protection and Control (P&C) cabinets are in great demand, whose leading customers are Iberdrola, Red Eléctrica de España (REE), Hitachi - ABB, Siemens, Ingeteam, etc.



6 Communication Box (Combox)

Mtech Group's Comboxes are the ultimate solution to centralize and simplify the control and monitoring of key devices in any environment.

These smart boxes are designed to efficiently group the communications equipment needed to manage trackers and weather stations, among other essential devices.

Our Combox offers a comprehensive solution that ensures smooth operation of your tracking and weather systems. With a robust and highly functional design, it provides a stable and reliable platform to coordinate all communication operations.



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BESS AUXILIARY TRANSFORMER SKID

CUSTOM, DESIGNED, ENGINEERED AND BUILT AT MTECH GROUP

Tailored solutions designed to meet the highest standards of quality, safety and performance.

100% CUSTOM
Solutions designed around your specific requirements.

QUALITY & RELIABILITY
Built to the highest standards using premium-quality components.

ENGINEERED TO PERFORM
Efficient, safe and ready for demanding environments.

Custom solutions. Proven expertise. Powering a **sustainable future**.

3+ GWh
OF PROJECTS DELIVERED WORLDWIDE



We design and manufacture fully customised auxiliary services skids for renewable energy plants, substations and industrial projects.

Each skid integrates the medium-voltage switchgear, the auxiliary services transformer, the low-voltage switchboard and any communications and control configuration required by the project.

Units are delivered fully completed, factory acceptance tested (FAT) and ready to connect, minimising on-site work and installation risks.

We manage the entire process at our own facilities, from design through to testing, acting as a single point of responsibility.

WHAT DOES IT SOLVE?

Faster, simpler project execution. Simply lift, bolt down and connect. Our auxiliary services skids reduce on-site civil and electrical works, minimise supplier interfaces, and shorten installation, commissioning and overall project timelines

Consistent quality and compliance. With the transformer, low-voltage switchboard, structure and earthing integrated and tested in the factory, every unit is standardised and repeatable. This ensures more rigorous quality control and streamlines compliance with IEC and AS/NZS standards, as well as customer specifications.

Easier operation and maintenance. All auxiliary equipment is consolidated in a single, accessible location, simplifying operation, maintenance and troubleshooting.

OTHER SKID AND CONTAINER INTEGRATIONS

UTILITY - SACLE SOLAR PV PLANTS



- Inverters
- Trackers
- HVAC
- Lighting
- Security
-Communications

BATTERY ENERGY STORAGE SYSTEMS (BESS)



- Container HVAC
- Control and protection systems
- Fire detection
- UPS
- Lighting

HV/ MV SUBSTATIONS AND SWITCHING STATIONS



- Protection relays
- Control panels
- Motorized switchgear
- Telecoms
- Building services

WIND FARMS AND HYBRID PLANTS



- Monitoring systems
- Switchgear
- Local LV auxiliary loads

INDUSTRIAL AND INFRAESTRUCTURE PROJECTS



- Compact prefabricated solutions for: MV transformation and LV auxiliary distribution

MANUFACTURING AND QUALITY

- IN-HOUSE DESIGN & ENGINEERING
- ELECTRICAL PANEL BUILDING & WIRING
- QUALITY CONTROL & INSPECTIONS
- STEEL FABRICATION & MACHINING
- FACTORY ACCEPTANCE TEST (FAT)

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OUR GLOBAL FOOTPRINT

+800 projects powering performance worldwide



EUROPE

10994MW

Belgium
Spain
Italy
France
United Kingdom
Romania
Portugal

AMERICA

8570MW

Argentina
Brasil
Chile
Colombia
El salvador
Guatemala
Honduras
Jamaica
Mexico
Peru
Dominican Republic

AFRICA

952MW

South Africa
Egypt



ASIA

965MW

Japan
Oman
Kuwait
Israel

OCEANIA

4000MW

Australia

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WHERE SOME OF OUR SOLUTIONS MAKE AN IMPACT

Explore how our solutions are driving real, measurable results across global markets, enhancing the efficiency, safety, and reliability of electrical systems while adapting to the evolving needs of each region.

AMERICA

BRASIL
Belmonte 455 MW
Boa Sorte 438 MW
Victor Jara 220 MW/1,1GWh *
Gabriela 220 MW/1,1GWh *
Lar Do Sol 360 MW
Rio Do Peixe 70 MW

CHILE
La Coya 200 MW
Gran Teno 241 MW
Gabriela 220 MW
Quillagua Ii 103 MW
Victor Jara 200 MW
Monteaguila 340 MW
Gabriela Bess 200 MW
Elena Bess 200 MW
Algarrobal 242 MW
Pelequén 175 MW

USA
Abes Run Solar Park 20 MW
Brewster Solar Park 39 MW
Mattaniah Solar Park 52 MW
Chisme Solar Solar Farm 347 MW

GUATEMALA
Hours 35 MW

MEXICO
Terranova 100 MW
Perote 100 MW
Potrero 300 MW
La Pimienta 300 MW

DOMINICAN REPUBLIC
Esperanza 90 MW
ENREN 58 MW

PERU
Intipampa 40 MW
San José 178 MW

COLOMBIA
Caballeros 10 MW
Cerritos 10 MW
La Medina 10 MW
Montelibano 10 MW
Sándalo Ii 10 MW
Pétalo De Magdalena 10 MW
Buenavista 10 MW
Portón Del Sol 127 MW
Sol Del Mar 10 M MW
Asturias 10 MW
La Paz Solar 10 MW
Sol De Zawady 10 MW
Tolú 10 MW

EUROPE

SPAIN
Arnedo 30 MW
Belinchon 150 MW
Bonete 150 MW
Chiprana 350 MW
Escatrón 150 MW
Escudero 240 MW
Núñez de Balboa 500 MW
Sigma 203 MW
Trillo 188 MW
Valdesolar 250 MW
Renopool I+II 330 MW
Villarino 225 MW

FRANCE
Mezos 25 MW

UNITED KINGDOM
Arbofield 14 MW
Uk Solarlight 10 MW
Burgate 14 MW
Dunmow 20 MW
Gander Down 10 MW
Markham Brook 10 MW
Living 10 MW

ITALY
Róvigo 72MW
Bolotana B 9,25 MW
Banditella 45 MW
Bolotana b 9,25 MW
Karalis 50 MW
Sandalia 100 MW
Banditella 45 MW
Maas 70 MW
Bando 94 MW

ASIA

OMAN
Amin 130 MW

JAPAN
Oita 25 MW
S13 35 MW
Sodegaura 20 MW
Sano 32 MW
Maibara 20 MW

AFRICA

SOUTH AFRICA
Zeerust 75 MW
De Wildt 50 MW

OCEANIA

AUSTRALIA
Mount Magnet Solar Park 10 MW
Port Augusta Solar Energy Park (PAREP)
Wunghnu Solar Park 90 MW
Wandoan 2 Solar Park 320 MW
Carwarp Solar Park 150 MW
Coast Solar Farm 235 MW
Edenvale Solar Park 204 MW
Aldoga Solar Farm 380 MW
Columboola Solar Farm 162 MW
Bluegrass Solar Park 200 MW
BESS Winton North 100 MW
BESS Mokoan 100 MW
Fulham Solar Park 80 MW
Wellington Solar Park 425 MW
Walla Walla Solar Farm 300 MW
Culcairn Solar Farm 457 MW
Gunnedah Solar Farm 10 MW
Hillston Solar Farm 1A y 2A 10 MW
HAY 1 Solar Park 10 MW
Blind Creek Solar Park 300 MW
Muswellbrook Solar Farm & Battery 135 MW

CLEAN ENERGY FOR A SUSTAINABLE ENERGY SYSTEM

+4GW

Contributing
to the generation
of cleaner power

15.967

Custom-engineered electrical, control, and power distribution solutions, with or without monitoring systems, designed to meet the specific technical and operational requirements of each project.

21

Total number of projects delivered since 2019.



WESTERN AUSTRALIA

Mount Magnet Solar Park (10 MW)

- Manufacturing of Combiner Boxes
- Customer: TE Connectivity

SOUTH AUSTRALIA

Port Augusta Solar Energy Park (PAREP) (107 MW)

- Manufacturing of Combiner Boxes
- Customer: Sterling & Wilson



QUEENSLAND

Coast Solar Farm (235 MW)
- Manufacturing of Combiner Boxes
- Customer: Gran Solar

Edenvale Solar Park (204 MW)
- Manufacturing of Combiner Boxes
- Customer: Gran Solar

Aldoga Solar Farm (380 MW)
- Manufacturing of Combiner Boxes
- Customer: Acciona

Bluegrass Solar Park (200 MW)
- Manufacturing of Combiner Boxes
- Customer: Gran Solar

Columboola Solar Farm (162 MW)
- Manufacturing of Combiner Boxes
- Customer: Sterling & Wilson

NEW SOUTH WALES

Wellington Solar Park (425 MW)
- Manufacturing of Combiner Boxes
- Customer : Gran Solar

Walla Walla Solar Farm (300 MW)
- Manufacturing of Combiner Boxes
- Customer : Gran Solar

Culcairn Solar Farm (457 MW)
- Manufacturing of Combiner Boxes
- Customer: Bouygues

Gunnedah Solar Farm (10 MW)
- Manufacturing of Combiner Boxes
- Customer: TE Connectivity

Hillston Solar Farm 1A y 2A (10 MW)
- Manufacturing of Combiner Boxes
- Customer: TE Connectivity

HAY 1 Solar Park (10 MW)
- Manufacturing of Combiner Boxes
- Customer: TE Connectivity

Blind Creek Solar Park (300 MW)
- Manufacturing of Combiner Boxes, Communication Boxes and Communication Racks
- Owner: Octopus, Customer: Gran Solar

Muswellbrook Solar Farm & Battery 135 MW
- Manufacturing of BESS auxiliary Transformer SKID.
- Owner: Bouygues Construction

VICTORIA

Wunghnu Solar Park (90 MW)
- Manufacturing of Combiner Boxes
- Customer: Gran Solar

Wandoan 2 Solar Park (320MW)
- Manufacturing of Combiner Boxes
- Owner: Vena Energy , Customer: Gran Solar

Carwarp Solar Park (150 MW)
- Manufacturing of Combiner Boxes
- Customer: Recurrent Energy

BESS Winton North (100 MW)
- Manufacturing Bess auxiliary Transformer skid.
- Owner/ Customer: European Energy

BESS Mokoan (100 MW)
- Manufacturing BESS auxiliary Transformer skid.
- Owner/ Customer: European Energy

Fulham Solar Park (80 MW)
- Manufacturing of Combiner Boxes and BESS auxiliary Transformer skid.
- Owner: Octopus, Customer: Gran Solar

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Calle Abubillas, 1
28320 Pinto. Madrid. ESPAÑA
+34 917 988 489

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