

PRODUCT CATALOGUE



W

۲

Secom

Jecom

EUROPEAN MANUFACTURER





RENEWABLE ENERGY COMPANY

"Our profession, by default, puts on us the responsibility and obligation to be part of meeting the challenge of halting the global warming and degradation of the environment. To meet this challenge, our ultimate goal must be to enable countries, corporations, companies, institutions, households and individuals achieve energy independence. Simply put, enable them to own the power. The solar, and only the solar, has that potential."



Hamlet Tunyan, CEO

TABLE OF CONTENTS

l

| About RECOM | 4-5 |
|------------------------------------|-------|
| RECOM in Numbers | 6 |
| RECOM Advantages at a Glance | 7 |
| Bloomberg TIER 1 - Global Partners | 8 |
| PV Modules | 9-21 |
| Inverters, Storage & Accessories | 22-25 |
| EV Chargers | 26-27 |
| Repower the World | 28 |
| Solar Associations | 29 |
| Project References | 30-31 |
| | |



What Drives Us

At RECOM we think differently and we are committed to the mission before us to lessen humanity's dependence on fossil fuel, overcome global imbalances and halt the degradation of our environment.

Renewable sources, ubiquitous and infinitely available, can supply energy evenly to people and communities across continents and regions, regardless of their wealth and social standing, generate growth and help avoid economic and military conflicts around the world-and all this in a clean and sustainable environment.

At RECOM we believe in such a future and we work constantly to make solar energy available everywhere and for everyone. Our aim is to solarize the world energy supply and make clean energy the source for all electricity, mobility and smart infrastructure of the future.

Our Values

Doing things right is one of our most important values at RECOM. We are committed to providing high-quality services and products to meet the interests and satisfaction of our customers. We provide value for money and deliver the best customer service and experience.

As we aim to achieve our dual goals of exceptional quality and fair price, we are always mindful of our commitment to act with the highest standard of integrity in all of our business decisions and actions. Internally, we are ethnically diverse, gender-equal one team, accountable and respectful among ourselves and towards others. Externally, the respect for human rights, labor laws, fair competition and environmental considerations are the guiding principles in our choices for outsourcing, procurement and end users.

Who we are

RECOM is a France based renewable energy company with notable presence in the global solar industry. RECOM produces modules, cells, inverters, hybrid storage systems, batteries and EV chargers. RECOM is a leading and the only Bloomberg Tier 1 PV module manufacturerin Europe with above 3.2GW annual production capacity and with sales of solar modules in more than 110 countries.

Along to our own manufacturing facility in France and local R&D team, we invest in, and work with leading global research institutions and manufacturers to innovate, develop, share and commercialize the latest technological advances in solar module manufacturing. Our primary R&D partner in the area of solar panels is a leading French research center, the National Institute for Solar Energy (CEA/INES). We also work with other research centers, universities and manufacturing companies as our portfolio expands. We drive innovation in unique energy production and storage applications. We pioneer in power and energy storage solutions, as it comes to skid mounted panel-inverter solutions for residential applications or to utility scale energy solutions.

All our products are designed and engineered in Europe. We are always ahead of the curve and we bring to consumers the very latest in technology.



RECOM Manufacturing Plant

RECOM's facility in Lannion, France is its main manufacturing arm where also RECOM's headquarters are housed.

The French facility, SILLIA VL, which was in operation since 1965 under French telecommunications giant SAGEM–SAFRAN and since 2014 under BOSCH, was acquired by RECOM in 2017. Since then the facility has been upgraded and upscaled with fully automated, state-of-the-art production lines.

Since acquisition, RECOM has heavily invested for the upgrade and the upscale, securing facility's cost efficiency, higher output, and lower carbon footprint. RECOM has maintained labor force, thus benefiting from decades of long experience, production ethics and highest quality criteria standards.

RECOM has supplied PV modules to some of the most prominent solar projects in France, developed by the biggest players in the market, such as ENGIE, EDF, URBASOLAR, Tenergie, Total, RES, CNR, Rexel, Langa, and many others.



RECOM in numbers



Production Capacity



Year that the company was founded



Clean and affordable energy replacing 2m tones of CO₂ emission



Experienced and qualified industry personnel across many continents



Countries RECOM PV modules installed



Revenues



RECOM advantages at a glance







A Leading European PV Module Manufacturer

TOP PV BRAND FRANCE - USA - MENA - VIETNAM - HUNGARY - GREECE

RECOM won the EuPD Research Sustainable Management GmbH Award for TOP BRAND PV MODULES



Based on the results of a survey carried out by EuPD Research among **French – USA – MENA – Vietnamese – Hungarian – Greek** installers on brand awareness, customer's choice and distribution

RECOM TIER 1



RECOM is the only Bloomberg Tier 1 PV module manufacturer in Europe with above **3,2GW** annual production capacity in more than **110 countries**

GLOBAL PARTNERS



Reinvent Technology PV Modules

Solar technology holds immense potential as a crucial component of the renewable energy landscape, paving the way for a sustainable future.





UNLEASH THE POWER OF THE BLACK TIGER:

SUPERIOR PERFORMANCE IN ANY ENVIRONMENT

BACKCONTACT TECHNOLOGY

From 430Wp & up to 610Wp









ADVANTAGES OF BLACK TIGER BACKCONTACT MODULES



World's 1st Efficiency Black Tiger modules provide numerous benefits to customers seeking a high-quality product with exceptional performance and aesthetic, captivating design.

The "Black Tiger" module utilizes N-Type cell technology in conjunction with a rear connection method known as BackContact. As a result, there is 0% front grid shadow loss, which increases the PV module's yield. Due to reduced shading on the front of the cell, the module maximizes total cell area realizing higher efficiency and resulting in a fast return on investment.



Guaranteed mechanical resistance to severe weather conditions



Positive tolerance



100% electroluminescence tested





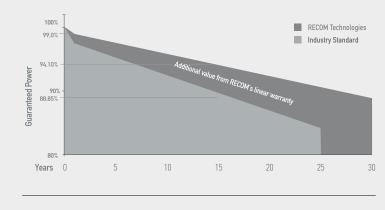


HIGHEST EFFICIENCY IN THE WORLD Black Tiger Series has "World's 1st" module

efficiency, as it reaches up to 23.6%.

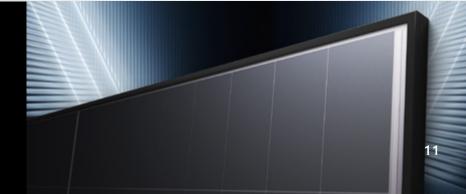
BENEFITS OF BACKCONTACT TECHNOLOGY

- No grid lines, pure black with cutting-edge all back contact cells
- +13.4% full life-cycle power generation than the traditional P-type modules
- >5% BOS reduction, significant saving on cables and mounting systems
- 100% silver-free, reliable supply than the other N-type modules











HETEROJUNCTION TECHNOLOGY

From 380Wp & Over 720Wp



ADVANTAGES OF LION HETEROJUNCTION MODULES

HIGH EFFICIENCY

In STC condition, due to the Tandem technology, HJT modules have higher efficiency at least by 1% compared to other technologies. HJT is active on both UV and infrared wavelengths and has a higher light output.

NO LID&PID

HJT has no power loss against 1% first year (LID) and up to 5% after with PID syndrome in standard mono perc module.

Heterojunction (HJT) photovoltaic module is a ground breaking technology. HJT technology guarantees high performance and low degradation of the PV module, substantially improving the results and the yield in the time.

Lion series reach over 720Wp power, 7% higher compared to standard PV modules.



Over 23,2% Module

Efficiency

Low temperature coefficient

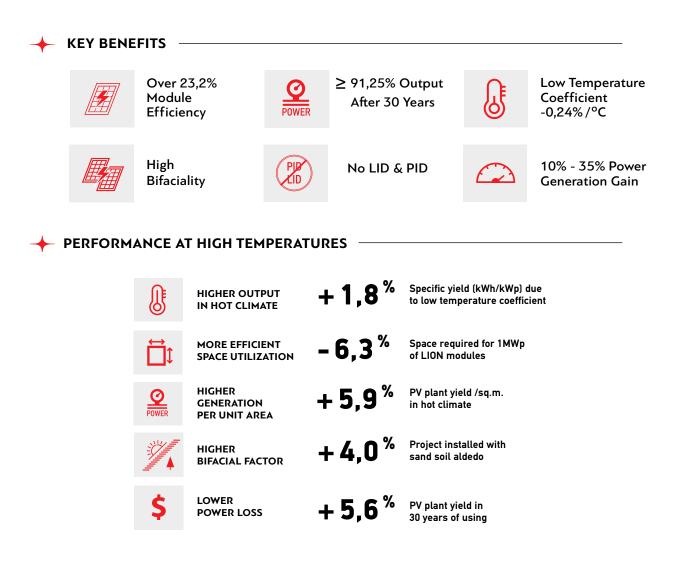


High energy yield









LOW DEGRADATION

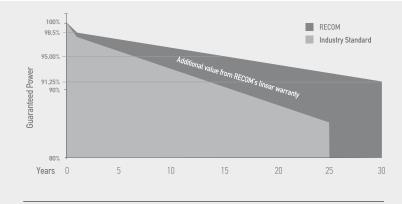
Lion series modules use HJT cell technology, which have lower degradation than Mono PERC panels.

More stable and sustainable electricity production.

Power yield \geq 95% after 15 years, \geq 92,5% after 25 years and \geq 91,25% after 30 years.

HIGHER PERFORMANCE

Gain up to 20% more energy yield, in low-light conditions, in the morning and evening hours and with cloudy skies.





Great appearance

BLENDS PERFECTLY WITH THE ROOFTOP



Scenario Analysis 1

100000m² (250*400m)Fixed area

GROUND POWER PLANT

BOS cost analysis Fixed adjustable mounting system , longitudinal double row 2P,30% sand reflectivity , Extremely low Environmental Temperature 9°C

| Ce | ell size/Layout | 166mm /120pcs | | 210mm /132pcs | |
|---------------------------|--|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Module | | Lion Series HJT Half-cut | L Brand Perc Half-cut | Lion Series HJT Half-cut | H Brand Perc Half-cut |
| Power (W) | | 375 | 375 | 700 | 670 |
| conversion efficiency (%) | | 19.98% | 20.59% | 22.53% | 21.57% |
| Installed capacity (MW) | | 11.09 | 10.71 | 12.15 | 11.22 |
| Power generation | 30-year power generation with the same area | 589247 | 501568 | 643358 | 547095 |
| | 30-year cumulative increase rate | 17.48% | benchmark | 17.60% | benchmark |
| BOS cost | Land cost | -3.53% | benchmark | -8.35% | benchmark |
| | Combiner box & cable costs | -4.78% | benchmark | -4.54% | benchmark |
| | Variable BOS cost | -0.42% | benchmark | -4.39% | benchmark |
| LCOE | LCOE | 0.1957 | 0.2110 | 0.1872 | 0.1954 |
| | LCOE calculation | -7.82% | benchmark | -4.4% | benchmark |

| Improved energy yield for 30 years: | +17.6% |
|---|--------|
| • Land cost saving: | -8.35% |
| • Combiner box & cable costs: | -4.78% |
| • Variable BOS cost: | -4.39% |
| • LCOE reduce: | -7.82% |





Scenario Analysis 2

ROOF POWER PLANT

BOS cost analysis Fixed adjustable roof mounting system , longitudinal double row 2P,70% sand reflectivity Extremely low Environmental Temperature -5℃

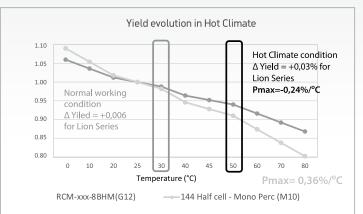
| Module | Lion series HJT Half-cut | L Brand Perc Half-cut | Lion series HJT shingled all black | H Brand Perc Half-cut |
|---|-----------------------------|--------------------------|---------------------------------------|--------------------------|
| Cell size/Layout | 166mm/120pcs | 166mm/120pcs | 158.75mm/132pcs | 210mm/120pcs |
| Power (W) | 385 | 375 | 415 | 405 |
| Efficiency (%) | 20.51% | 20.59% | 21.17% | 21.07% |
| Installed capacity (MW) | 1.11 | 0.77 | 0.79 | 0.83 |
| 30-year power generation with the same area | 43567 | 36791 | 31057 | 27504 |
| 30-year cumulative increase rate | 18.42% | benchmark | 12.92% | benchmark |
| Roof cost | -1.48% | benchmark | -0.89% | benchmark |
| LCOE | 0.2629 | 0.2880 | 0.3793 | 0.3964 |
| LCOE calculation | -9.58% | benchmark | -4.51% | benchmark |

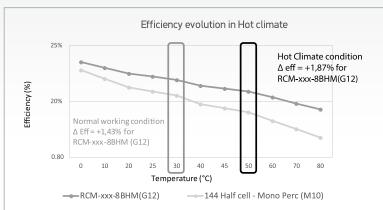
| Improved energy yield for 30 years: | +18.42% |
|---|---------|
| Land cost saving: | -1.89% |
| LCOE reduce: | -9.58% |

LOWEST TEMPERATURE COEFFICIENT

Lion series modules with HJT cell Technology, perform at high environmental temperature. • Amorphous silicon (a-Si) has less power loss due to the temperature and reduce the thermal powercoefficient of the HJT (compared to single Monocrystalline composition).

 \bullet At the operating temperature of 50 $^\circ$ C, Lion series has better Efficiency than standard modules





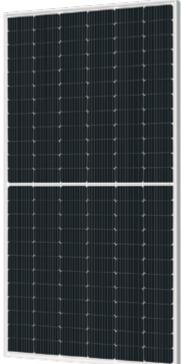


TECHNOLOGY OF THE FUTURE

N-TYPE PV MODULES WITH TOPCon TECHNOLOGY

From 410Wp & Over 710Wp







ADVANTAGES OF LYNX BIFACIAL MODULES

HIGH EFFICIENCY (22,86%)

The N-TOPCon module has a strong power generation capacity per watt, which is reflected in its strong advantage in the cost of electricity and a strong premium capacity.

Pmax

Low Pmax

No LID (< 0.2%) & no risk LeTID N-type module is a fundamental solution to the risk of LID because there is no BO pairs for its phosphorus-doped substrate. After LeTID test, N-TOPCon modules show no power loss.

Bifaciality

Lynx bifacial series have been widely applied in large amount of PV systems in the world with more than 10% power gain from the bifacial design comparing to monofacial power plant (Bifaciality factor up to 80%).



Positive tolerance



Guaranteed mechanical resistance to severe weather conditions



100% electroluminescence tested



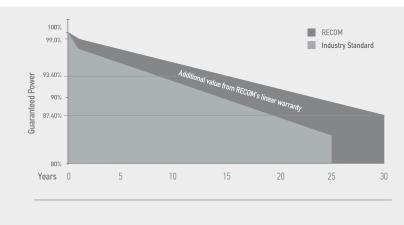




N-type solar cells (TOPCon) are seen as the technology of the future.

N-type (TopCon) technology guarantees high performance and low degradation of the PV module, substantially improving the results and the yield in the time.

"Lynx" Series module is the ideal solution for end users who want a Quality PV & reliable product over time and a fast turnaround on their investments.



First Year 2-30 Year ≥ 99.0% **≤ 0.40%** Decline Output











SUPERIOR PERFORMANCE AND RELIABILITY

SHINGLED TECHNOLOGY

Over 420Wp & Over 675Wp









Reduced Risk Of Micro Cracks

ADVANTAGES OF PUMA SHINGLED MODULES

REDUCED RISK OF MICRO CRACKS

The replacement of soldered ribbons with a low temperature and flexible ECA decreases thermal stresses during the modules production and operation, decreasing the risk of micro cracks formation.

Mechanical stresses (e.g. snow load) are relieved by the flexible interconnection, improving the reliability in harsh environments (as reflected in the increased warranty provided).

HIGHER CELLS DENSITY AND IMPROVED AESTHETICS

The inactive area is considerably reduced, no ribbons and cells gaps on strings improving the efficiency and aesthetic in full black modules.

LOWER RESISTIVE LOSSES AND THERMAL COEFFICIENT

The resistive losses in strings are considerably decreased thanks to the lower current of shingles (1/6 or 1/7 of the original cell) and the lack of interconnection ribbons in strings, improving at the same time the performance at high temperatures.



Higher yield per surface area



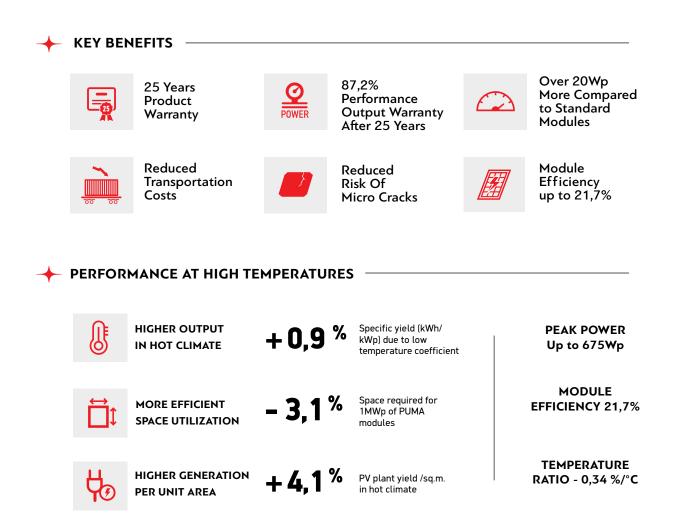
Higher yield in hot climate



Low Pmax at-0,3% / °C







SMALL SIZE FOR ROOF TOP INSTALLATION

The PUMA module with power class over 555Wp, efficiency up to 21,6% and 25 years product & up to 30 years output warranty is:

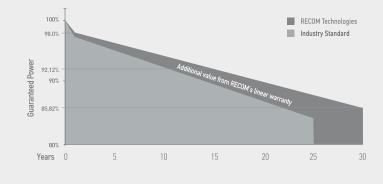
• Best "Value for money" choice

• Ideal for rooftop installations (in the same size of the rooftop, more power can be installed compared to standard modules)

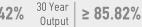
Low LCOE

FOR COMMERCIAL & UTILITY INSTALLATIONS The PUMA module with power class up to 675Wp, efficiency up to 21,7% and 25 years product & output warranty.

SEAMLESSLY INTEGRATES WITH THE ROOFTOP



First Year Output ≥ 98.0% 2-30 Year Decline ≤ 0.42%







ADVANCED TECHNOLOGY & SUPERIOR QUALITY

HALF-CUT TECHNOLOGY

From 360Wp & Over 670Wp





ADVANTAGES OF PANTHER HALF-CUT MODULES

Pmax

Low Pmax

Groundbreaking technology; higher power output and improved system performance. The ideal solution for end users who want a fast turnaround on their investments. A fully certified premium quality and high efficiency module made with A grade materials.

& Pmax

Industry leading Low Pmax



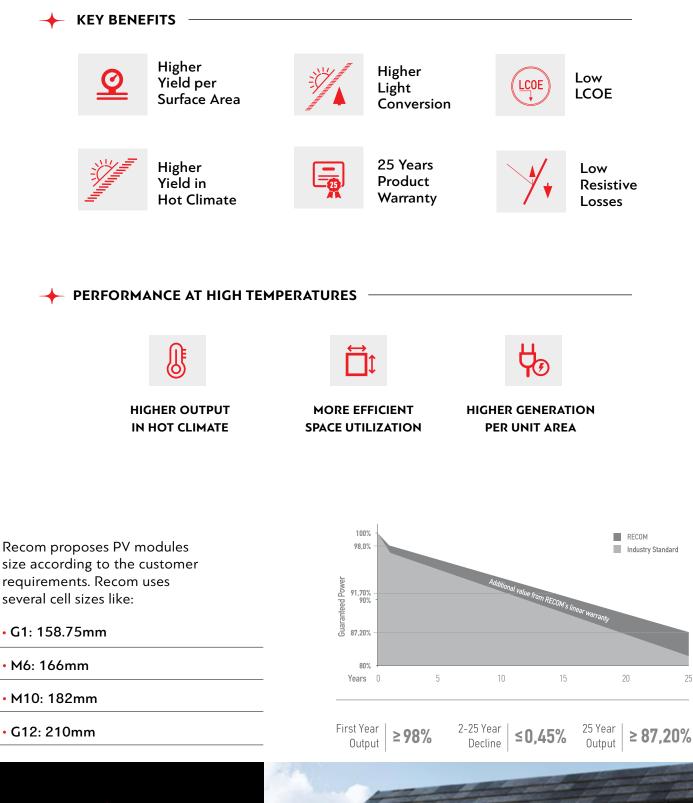
Outstanding performance under extreme heat as well as low intensity solar



100% electroluminescence tested









BLENDS PERFECTLY WITH THE ROOFTOP





INVERTERS - STORAGE ACCESSORIES

Intelligent energy management for a resilient energy ecosystem.



INVERTERS



HELIOS



Single MPPT 0.6 - 3.3 kW

AP⊕LLO



Dual MPPT 2.5 - 6.0 kW

SINGLE PHASE SERIES

- Max efficiency 98% IP66 protection
- Zero-export feed-in operation
- DC Input: 200% oversizing
- In-built global MPP scan for higher yields during shadowing conditions
- Quick and easy commissioning / configuration



3 - 15 kW

THREE PHASE SERIES

- Max efficiency 98,3% IP66 protection
- Low startup voltage
- Ultrawide MPPT voltage range
- Support high power solar panels
- Built-in export power control



POSEIDON 17 - 30 kW







40 - 60 kW

MULTI MPPT

- Max efficiency over 98% -IP66 protection
- Low startup voltage
- Ultrawide MPPT voltage range
- Built-in export power control
- SPD type II protection (AC & DC)



275 kW

MULTI MPPT

- Max efficiency 99,03% -IP66 Protection
- 40A max input current per MPPT
- 12 MPPT trackers
- 2 strings per MPPT
- Supports high current bifacial PV modules with max PV current 20A

INVERTERS

HYBRID SERIES



Dual MPPT 3.0 - 7.5 kW

T+TAN

Dual MPPT

5.0 - 15 kW

SINGLE PHASE HYBRID SERIES

- Max efficiency 97,6%- IP65 protection
- Higher efficiency on charging and discharging up to 97.0%
- Switchover time <10ms
- Low start output voltage resulting to longer operation (higher yields) throughout the day
- On & Off-grid parallel function up to 15kW
- Zero-export feed-in operation



THREE PHASE HYBRID SERIES

- Max efficiency 98%- IP65 protection
- Higher efficiency on charging and discharging up to 98.5%
- Switchover time <10ms
- Less energy loss from battery to inverter
- Three-phase unbalanced output up to 50% nominal output power on single phase
- Zero-export feed-in operation

STORAGE



5.0 - 32.5 kWh & 7.2 - 46.8 kWh

- Stackable modules, easy and fast for single person installation.
- Unique battery heating technology which enables efficient operation at low temperatures
- Soft start protecting batteries and inverters from a sudden surge
- IP65 for both indoor and outdoor installation

ACCESSORIES

DATA LOGGERS



Logger-Z

- Supports up to 32 devices
- Supports local & remote monitoring



Logger

- Local & Remote monitoring, setting and upgrade of batch inverters
- Support large-capacity data storage



• Quick installation with "Plug & Play" function

- IP 65 dust prevention water proofing designs
- Stable data transmission and good reliability
- Data Transfer Interval 5 mins
- WiFi Plus
- Data Transfer Interval 10 sec

SOFTWARE (MONITORING)



- Quick and easy WIFI configuration
- Rich data analysis-Realtime/ Daily/Monthly/Yearly
- Check and control of the plant anytime, anywhere





EV chargers are the catalysts of a transformative era, fuelling a future where electric vehicles reign supreme, emissions are minimized, and sustainable mobility becomes a seamless reality.







ADVANTAGES

- Plug or socket outlet selectable.
- Integrated current failure monitoring (30mA AC & 6mA DC)
- Integrated with PEN protection and no earth rod
- Encrypted communication based on TLS
- Indoor and outdoor easy installation
- Integrated RFID function

- Form an intelligent photovoltaic, storage and EV charging energy system through the communication between the smart EV charger and RECOM inverter.
- Remote setting and monitoring with APP and website

Jecom

- Smart dynamic load balance control
- Set timers to reduce your cost during peak and valley price





REPOWER THE WORLD

Driven by the vision of a sustainable future, at RECOM we support the transition of solar energy into a meaningful and integrated part of everyone's livelihood. Committed to our vision we actively contribute to the development of emerging energy solutions.

RECOM drives households and businesses to produce energy through solar and achieve energy independence towards a sustainable future.



EUROPEAN MANUFACTURER

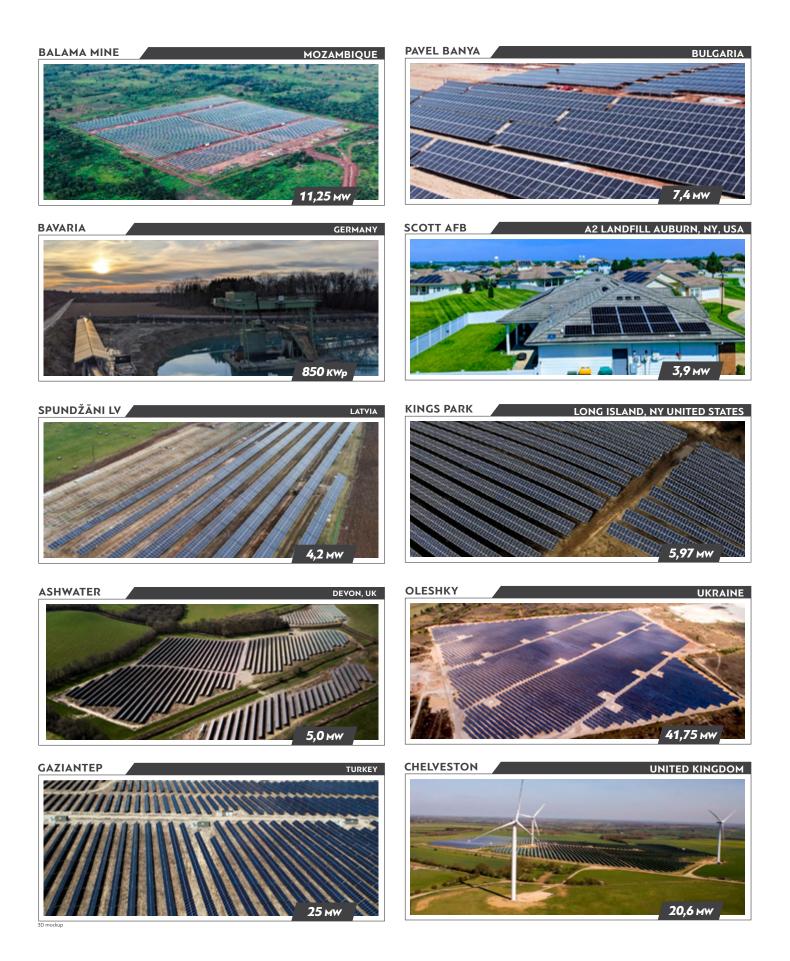


SOLAR ASSOCIATION MEMBERSHIPS





PROJECT REFERENCES



PROJECT REFERENCES





WE WORK WITH AND FOR THE WORLD JOIN US

WWW.RECOM-TECH.COM



CYPRUS

1 Avlonos Street, Nicosia, 1075 Cyprus T: +357 22 008009 E: info@recom-tech.com

FRANCE

4 Avenue Pierre Marzin 22300 Lannion, France T: +33 0296058050 E: contact@recom-sillia.com

U.A.E

Office 801, Twin Towers, Baniyas Street, Dubai, United

Arab Emirates. P.O.Box 41423,

T: +971(4)2678443

E: info@recom-tech.ae

SINGAPOR

Level 39, Tower 2 Marina Bay Financial Centre 10 Marina Boulevard 018983 Singapore T: +65 68186030 E: info@recom-tech.com

GERMANY

Speditionstraße 21 Düsseldorf, 40221, Germany T: +49 211 88231669 E: info@recom-tec<u>h.com</u>

....

3 & 5 Hospital Approach, Chelmsford, Essex CM1 7FA T: +44 01245 440302 E: info@recom-tech.co.uk

GREECE

1 Poseidonos Str. 17342, Ag. Dimitrios

T: +30 2182189858

E: info@recom-tech.com

Athens, Greece

ITALY

Via dell' Artigianato, Z. I., Vanzo di San Pietro Viminario, PD 35020, Italy E: info@recom-tech.com

580 California Street, 12th & 16th Floors San Francisco, California, CA 94104 T: +1 (561) 388 1003 E: info@recom-tech.com