



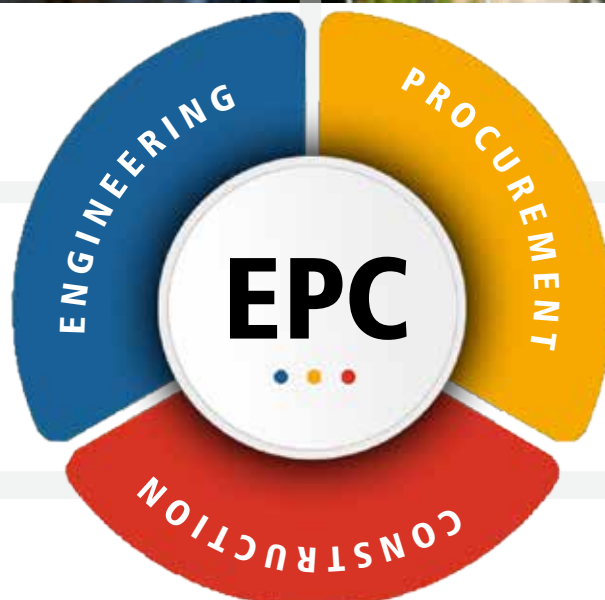
ZYTECH SOLAR



www.zytechsolar.in



ZYTECH SOLAR



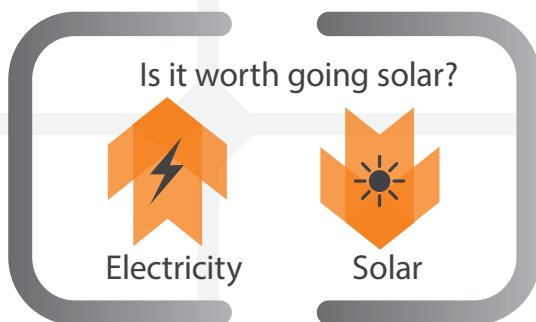
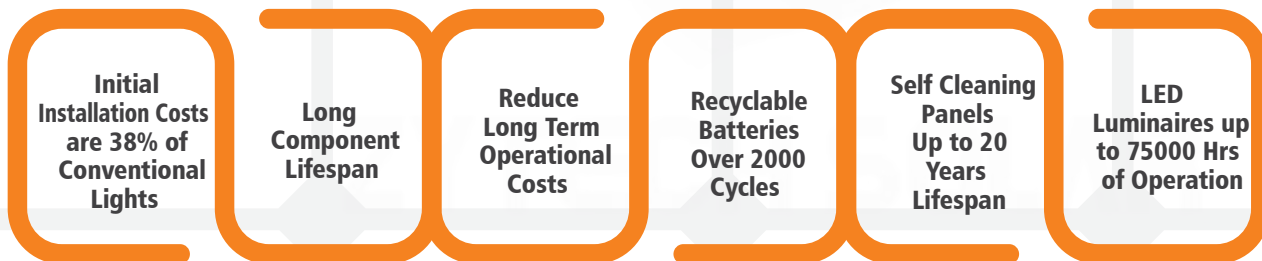


ZYTECH SOLAR

WHERE TO USE



ENDLESS POSIBILITIES



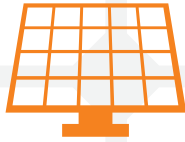
LOWER ELECTRICAL COSTS



LOWER INSTALLATION COSTS



ZYTECH SOLAR



ZYTECH SOLAR

Zytech Solar is a Spanish manufacturer of photovoltaic modules designed to produce electricity from sunlight. Our main products are aimed at solar photovoltaic energy: PV modules, concentrated photovoltaics (CPV) and off-grid PV systems.

Zytech's added value resides in the development, design, manufacture and marketing of photovoltaic products and systems which adapt to the specific needs of each project.

Zytech was founded in Zaragoza (Spain) in 2005. Since then the group has progressively increased its infrastructure and production capacity to become a global company with offices and headquarters in Spain, Germany, India, Taiwan, France, Italy, Benelux & USA.

Manufacture of Photovoltaic Modules

Zytech Solar PV modules are manufactured on our own assembly lines and those of our sister companies in accordance with the market's most stringent quality standards and using only state-of-the-art industrial machinery.

Zytech uses the highest quality and most efficient mono-crystalline and polycrystalline silicon cells in its modules to offer an extensive power range from 2 W up to 320 W.

Zytech modules are used in both off-grid photovoltaic installations (rural electrification, water pumping systems, telecommunications, lighting, etc.), as well as in grid-connected systems (solar farms, industrial roofs, houses, etc.) and can be installed on buildings, roofs, car parks, warehouse roofs and fixed structures.

Zytech modules are tested by TÜV and certified according to IEC 61215 Edition 2 and IEC 61730



ZYTECH SOLAR

ZYTECH EPC



Zytech EPC is a fully-integrated player in the global photovoltaic market focused on Asset Funding & Placement, Development, EPC, O&M Service and Trading.

Supported by a proven track record and true worldwide presence, the company provides 360° turnkey solutions adapted to each customer's individual needs.

Zytech EPC has built a global reputation by deploying outstanding price-performance ratio solar plants that exceed customer expectations, transforming solar energy into green assets by maximising value and mitigating risks.

Our recognised capabilities across the entire value chain enable us to manage all phases of the solar development cycle, from market and site identification to the grid connection and subsequent plant operation.

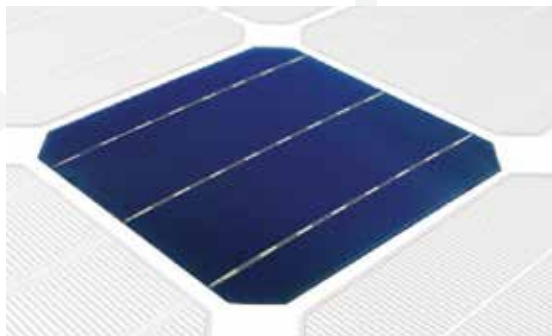
Zytech Solar is a Spain-based company with presence in more than 20 countries over 5 continents and has implemented around 170 MW of solar energy all over the world.



ZYTECH SOLAR



TECHNOLOGY & DEVELOPMENT



We know you have a choice, that's why ZYTECH develops off-grid solar systems to perform as effectively as wired systems with no compromise in performance. So what are you waiting for? Come into the Smart Era.



Deep discharge kills batteries. ZYTECH batteries never discharge fully maximizing battery

ZYTECH designs all its products as integrated lighting systems to ensure all parts work together making for long life and reliable performance

A battery's longevity depends on its charge level day-to-day, A battery will last longer if it is recharged to

4

Our solar lighting systems use critical engineering criteria to ensure 4+ days of autonomy

Battery sizing is considered with the total system to ensure minimal discharge

22%

PV efficiency and adequate battery storage ensure reliable performance all night, every night

We utilize VRLA and Lithium Batteries in our systems, depending on the use of each product.

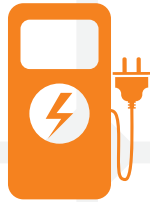
100%



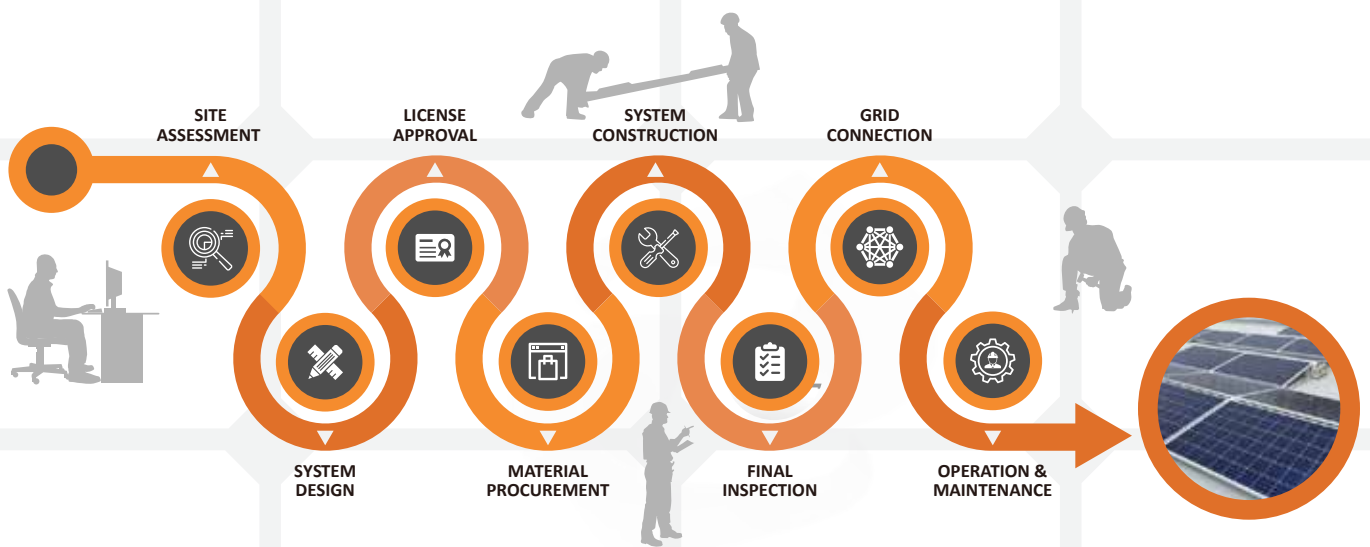
The energy collected by the batteries through the solar panels always exceed the amount spent by the luminaire



ZYTECH SOLAR



SYSTEM DEVELOPMENT



We provide turnkey solutions to our customers, from project management and design & engineering, to construction, operations, and maintenance. Zytech Solar has many years of experience with commercial rooftop and ground mounted systems and emphasizes quality and reliability for its systems. We use only high efficiency modules with our own solar module design to ensure that the system can run for 20 years. With our cumulative experience, we guarantee efficient installation of high quality systems.

Our EPC services

engineering, procurement, and construction



Consultation, planning, and design

- Assess site, analyze local conditions and feasibility of building PV systems
- Determine the most suitable capacity for the system
- Produce technical design and output power generation forecast
- Apply for all necessary documents and licenses
- Project cost calculation and detailed construction plan



Construction and installation

- Experienced team of trained electricians and engineers
- Reliable and high-quality installation within guaranteed completion time
- Purchase all the necessary components from quality suppliers to fulfill the highest quality requirements



Operation and maintenance

- Remote monitoring of output power generated by the system
- Prompt reaction to any actual or potential emergency
- Periodic inspection



ZYTECH SOLAR



ZYTECH EPC STORE

Engineering, Procurement & Construction Services

SOLAR POWER UNLIMITED

Zytech engineering, procurement, and construction (EPC) team provides bankable, innovative and reliable solar energy solutions to customers around the world. Offering “turnkey” working systems due to the set structures Zytech has in place, we are able to provide a complete spectrum of services for projects from viability studies to commissioning.

ZYTECH ON GRID & OFF-GRID

The simplest and most reliable way to put solar to work at your home or cottage is a Home Energy Solution! These kits are designed for fast, easy and fully code compliant installations. With features such as quality ZYTECH solar modules, strong solar mounting systems and battery charge protection, you’ll have the very best equipment in an integrated solar power system. Larger packages come complete with DC-AC inverters, allowing full integration with generators and home wiring. Safe, secure and reliable!

As an inclusive EPC provider, Zytech is able to retain their position as a single point of contact for all solar energy projects. Zytech in-house team of experts strive to maintain the highest standards in reliability, extendibility and low failure rates. Zytech comprehensive experience ensures cost effective implementation solutions for even the most complex projects. Zytech has the ability to deliver projects on-budget and on-time due to our immense experience providing construction services for a wide variety of applications. Zytech has implemented power systems for Homes, Farms, Institutes, IT’s, MNC, Telecom, Oil and Gas, Environmental Monitoring, Educational and Remote Living.

Renewable

- ✓ We design solar plants with optimum PV output committed to achieve the most affordable levelled cost of electricity in any region of the globe.

PROCUREMENT & PURCHASING

- ✓ We are able to negotiate and supply bankable technology of key providers and services suitable to the project at the best terms possible.

PRODUCTION

- ✓ In one of the most advanced production lines in Europe, which is completely automated and robotised, we produce our awarded PV modules and patented R&D+I solutions.

PROJECT MANAGEMENT

- ✓ From A to Z, we plan the whole process taking care of every detail to guarantee the utmost project completion. instead of oil.

CONSTRUCTION

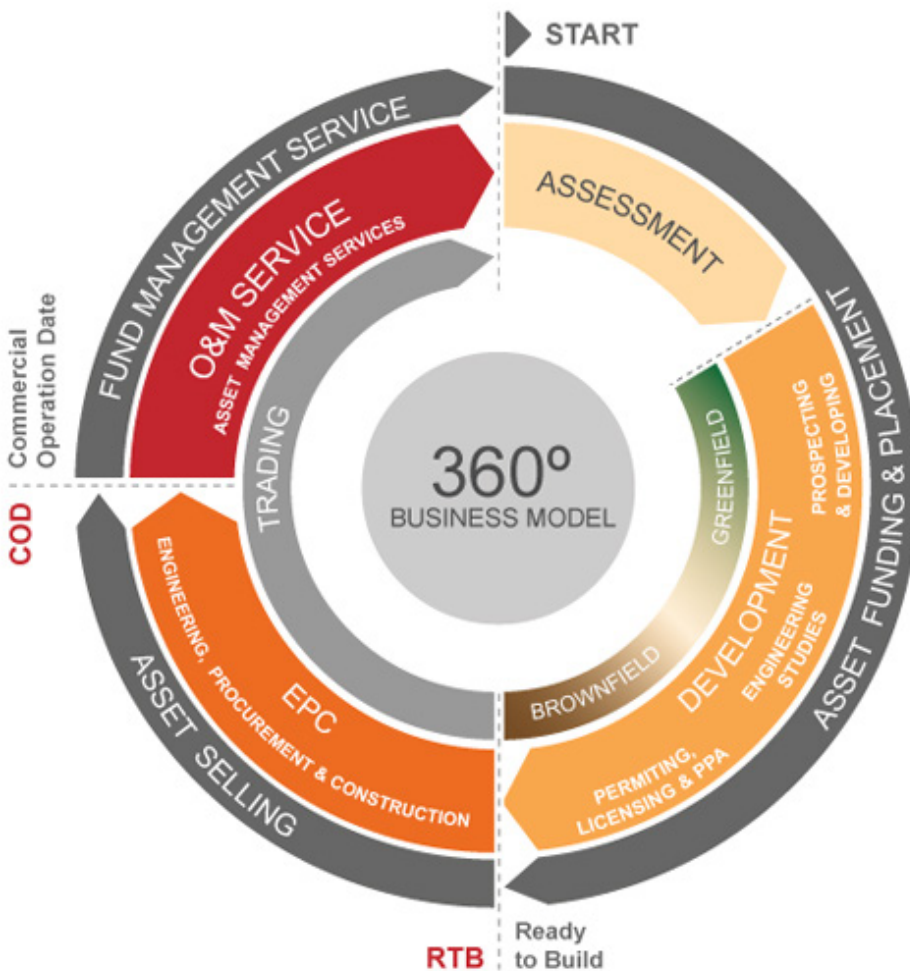
- ✓ We manage referenced contractors to build the project, assuring the highest level of quality within the time and cost deadlines, in total compliance with local regulations.variable costs.



ZYTECH SOLAR



ZYTECH EPC 360⁰



ASSET FUNDING & PLACEMENT Raise funds for projects in development by the company in different continents, providing the most appropriate type of capital.

DEVELOPMENT Originate the almost PV investment's portfolio in the RES sector, enabling them with affordable and competitive power solutions, that consistently delivers best returns to our satisfied customers.

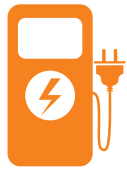
EPC To perform a Full-Service EPC, undertaking PV projects from one single point of contact.

O&M SERVICE Benefit from local support of managing more than 600 MW across Europe, Asian and Pacific, Middle East and the Americas.

TRADING as the brand of the company, Zytech Solar is used for activities in Trading, Distribution and Procurement of products at the best market prices in the photovoltaic sector.



ZYTECH SOLAR



ZYTECH O&M SUITE

Operation Management

- Operation reporting;
- Full monitoring and supervision by OMC;
- Incidents management.

Maintenance Management

- Maintenance management and reporting;
- Preventive maintenance optimizing;
- Corrective maintenance;
- Claiming and warranty management;
- Stock management & procurement.

Experts pooling and support

- Thermograph inspection (ITC Certified);
- Medium-power and SCADA experts;
- PV modules manufacturer's competences;
- Engineers trained by inverters manufacturers;



The company provides its clients with complete **Solar O&M** service to maximize the performance ratio of its PV installations across the globe. We monitor and supervise any solar project worldwide with an awarded multi-technology platform from our Operations Management Centre, which you can test at our Energy Portal.

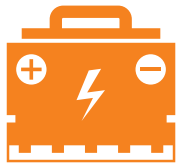
ZYTECH SOLAR has devoted **O&M** field teams to ensure the maximum production, and constantly look for ways to optimise each photovoltaic asset's return, either built by Zytech Solar or 3rd parties.

Our satisfied customers have positioned our PV O&M Service as one of the most trusted in the PV market. As your **O&M** partner, we will protect your asset and maximize your return.





ZYTECH SOLAR



ZYTECH ON GRID

APPLICATIONS

Because Zytech is a manufacturer with its own manufacturing plant, we can offer modules from 3 to 320W power with maximum flexibility that can adapt to the specific needs of any project, whatever size and location, whether for an off-grid or grid-connected installation.

ON-GRID-CONNECTED INSTALLATIONS

In a growing number of countries there are government regulations which provide incentives for photovoltaic energy production via production premiums, tax incentives or electricity bill discounts. In these cases, the photovoltaic installations are connected to the grid and the energy produced is fed in and consumed at the nearest consumption points. This means that the energy is produced and consumed locally, avoiding unnecessary losses during grid transport.

Zytech modules are ideal for grid-connected installations given their high robustness and reliability, as well as their excellent value for money, which allows you to get the most out of your investment in any project from day one:

- **Solar Photovoltaic Farms.**
- **Photovoltaic Installations for Industry, Commercial, Institute, Agricultural and Livestock Roofs.**
- **Domestic Installations.**
- **Building Integrated Installations.**



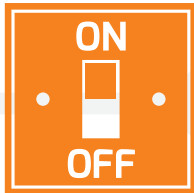


ZYTECH ON GRID PROJECT EXECUTION

Site-Feasibility Studies	Preliminary	Civil Works	AC Electrical system	Security System
Finalization of site location	Basic Engineering of Plant	Security cabin, prefabricated 4x3 feet	Installation of step up transformer	Fire / smoke detect system for inverter / control system
Acquisition of land	Submission of BOQ with offered makes, SLD and Pvsyst report	Mounting structure foundation	Ac cable (Al) from transformer to RMU / switchgear	Security System (Plant surveillance camera)
Land document	Finalization of EPC contract document	Transformer foundation	Ac cable (Al) from RMU / switchgear to Evacuation point	Water Supply
Ensuring site availability of all times without hassels or hindrances for peaceful execution of project	Detailed Engineering	Outdoor switchgear foundation	Cable termination and Auxiliaries	RO Plant for water treatment if any required
Geotechnical site survey (Soil/Resistivity test, final coordinates)-Soil investigation	Preparation of all drawings- Civil,mechanical and electrical	Transformer yard fencing and gravel laying	Switchgear at main evacuation point	Piping arrangement for module cleaning system
Land levelling/Compacting	Preparation of all documents- Civil,mechanical and electrical	Trenches for DC cable laying	Battery backup for all switchgears	Water pump with accessories
land clearing	Submission of drawings and documents list	Trenches for AC cable laying	Metering switchyard as per SEB specifications (includes CT, PT, main and check ABT meters and required protection equipment)	Drilling of one tube well
(Sunsimulation Report)	Submission of technical data sheet of all equipment	Trenches for communication cable laying	Transmission line if required	Miscellaneous
Liaisoning & Approvals	System sizing calculations	Plant perimeter fencing (chain link type)	Substation bay at GSS if required	Control room accessories and operator furniture
Land registration / Conversion	Quality assurance plan	plant internal road from main gate to control room(WBM only)	Protection System	Fire Extinguishers and electrical safety items
Stamp duty for land	As built drawings and O & M Manuals	Main gate	Earthing strip grid for MMS	Consumables (Paint, Cleaning, accessories)
Local state Govt.project registration	Project handover documentation	Water storage tank	Chemical type maintenance free earthing electrode for the scope mentioned above	Control room furniture
Power evacuation permission from local Discom	Procurements	Rain water drain system	Equipment earthing restricted to scope as mentioned above	Testing and Commissioning
SLD approval from local electricity authority agencies	Procurements of central inverters, Structural fabricator, Dc cables, AC cables, Step up transformer, LT,HT panels, Scada systems, Data log monitoring, Lighting Arrestors, Security system, Other electrical accessories	Main control room / Inverter room	Lightning Arrestors for DC	Inspection of equipments
bay booking at local substation	Finalizing contractors for civil, electrical, module mounting, structure mounting etc	Mechanical Works	Auxiliary System	pre-Commissioning tests of items in the scope of Waaree
Facilitation of power sale	Project Construction Activities	Structure for module mounting	Auxiliary transformer for plant power supply	System commissioning as per the scope mentioned above
PPA Execution	Water and Power supply for construction	Structure for string monitoring box	Auxiliary power distribution system	On-site training and system handover to client for the scope mention above only
Detailed Project Report-Technical	Office and infrastructure for construction	DC Electrical system	Main control room electrification	Operation & Maintenance
Approval for grid synchronizaton if required	Storage and other temporary constructions	Fixing of solar modules	Security room electrification	O & M Spares
Final Completion Certificate		Solar cable-From module to string combiner box	Plant lighting (Solar street lights @ 200nos only)	Power sale billing and payment collection
Commissioning certificate from Govt		MC4 compatible connectors	Auxiliary power cables and accessories	
Corporate Social Responsibility at site		Conduits for burying unarmoured solar cable	Monitoring System	
		DC cable (Al) from string combiner box to inverter	Data log monitoring system	
		Cable terminations as per the scope above	Weather station	
			Internet connectivity	



ZYTECH SOLAR



ZYTECH OFF-GRID - SAFE, SECURE & RELIABLE

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Construction.:

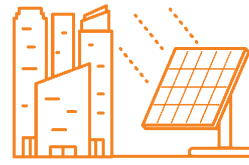
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ZYTECH SOLAR

ZYTECH BIPV



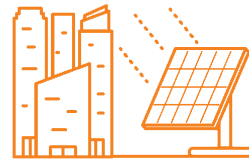
The construction industry is increasingly seeking buildings with energy self-sufficiency and energy savings, whilst maintaining aesthetic integration of the installations. In addition to its standard modules, Zytech offers special glass-glass modules for building integration for a range of applications: facades, roofs, shades, skylights...Zytech's special modules are normally manufactured to order based on the technical and aesthetic requirements of each project and will improve any project's thermal and acoustic insulation.



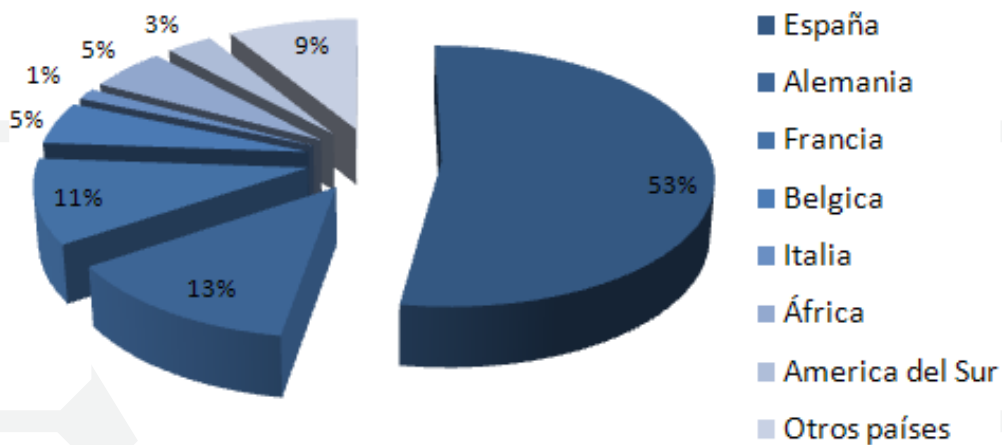


ZYTECH SOLAR

ZYTECH PROJECTS



COUNTRY	POWER
Spain	20 MW
Germany	18 MW
France	10 MW
Belgium	1.5 MW
Italy	15 MW
Africa	2.5 MW
South America	2.5 MW
Other countries	2 MW

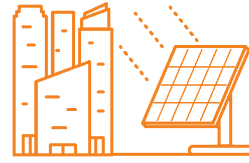


- Fortune 500 clients such as ABB and ACS -Maetel .
- A significant number of orders from satisfied repeat clients.
- Recognition and presence in key FV markets such as BENELUX, France, Germany, Italy and Spain give Zytech an advantage over European and Asian manufacturers.



ZYTECH SOLAR

ZYTECH PROJECTS



India - Telangana

Capacity: 1MWp



India - Greater Noida

Capacity: 1.2MWp



Taiwan - Agongdian Reservoir, Kaohsiung

Capacity: 2.32MWp



Taiwan - Xizhou Township, ChangHua

Capacity: 465kWp



Germany - Rettenberg

Capacity: 458kWp



Taiwan - Xinfeng Township, HsinChu County

Capacity: 1.99MWp



USA - Glorietta Bay Inn, Coronado, California

Capacity: 48kWp





ZYTECH SOLAR



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