



One Solar

EPC Services

Contact



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EPC/BOS Contract Advisory Services

For energy investors and IPPs who have developed or acquired a PV or BESS project and reached RTB (Ready-to-Build) status, selecting a construction service provider capable of delivering the project on time, within budget, and to the highest quality standards is critical.

At One Solar, we support our clients throughout the entire tendering process for EPC or BOS construction services, ensuring the selection of a provider that offers the best solution tailored to the client's specific requirements.

Our dedicated Procurement advisory team is well-equipped to assist by leveraging our strong relationships with top EPC contractors in the Iberian market, along with our comprehensive technical expertise and extensive experience in energy project construction and commissioning.

We work to refine technical requirements and specifications, prepare tenders, and oversee procurement processes. Our team collaborates with customers to identify specific needs and technical specifications that optimize project outcomes and minimize LCOE (Levelized Cost of Energy). Additionally, we provide support in negotiating EPC/BOS contracts and their associated technical annexes.

Description

1. Project Documentation Review & Preparation of Tender Documentation



Review of Preliminary Documentation: Assess basic design, existing studies, and administrative permits.



Preparation of Minimum Technical Requirements (MTR): Develop specifications that will serve as the technical document for EPC bidding, subject to client approval.



Preparation of Technical Annexes: Create compliance guarantees and outline responsibilities to be considered in the EPC bidding process.



Preparation of Tender Documentation: Compile essential documents including Instructions to Bidders, Bidding Procedures, Preliminary Design, Project Description, Project Schedule, and Bidding Templates.



Validation of the Supplier List: Confirm the list of suppliers to be utilized for the procurement of main equipment in the project.



2. Preselection of Contractors



Conduct a preselection round to provide the client with a shortlist of EPC contractors for consideration in the bidding process.



One Solar and the client will collaboratively establish evaluation criteria for this phase, based on factors such as aggregate installed capacity, relevant experience with PV projects of similar scale, and ongoing local and international O&M capacity.

3. EPC/BOS Tender Management



Management and Advisory Services: Oversee the bidding process for EPC contractors, providing guidance and assistance in the selection of equipment and materials. Prepare comprehensive reports to ensure the client has full knowledge and control.



Bid Evaluation: Conduct a thorough evaluation of bids, including a technical and economic comparison of proposals received from EPC contractors.



Q&A Management: Lead the question-and-answer rounds to clarify any uncertainties during the bidding process.



Schedule Review: Assess the schedules submitted throughout the bidding process to ensure alignment with project timelines.

4. Technical Support During the EPC/BOP Contract



Contract Support: Provide assistance with the EPC contract, paying particular attention to issues related to guarantees, market pricing, support agreements (including spare parts provision), suggested penalties, and plant acceptance procedures.



Insurance Support: Offer guidance on construction and/or operational insurance to ensure comprehensive coverage.



Utility Scale EPCM Services

PCM stands for Engineering, Procurement, and Construction Management services. It is a project delivery model commonly used in large-scale construction and infrastructure projects. In an EPCM contract, the One Solar provides the following services:

Engineering Office: One Solar designs the project, preparing all necessary technical documents, drawings, and specifications, and is responsible for the project planning.

Procurement: On behalf of the client, One Solar handles the tendering process for the Equipment procurement, Installation Services contracts (Civil, Mechanical and Electrical works) and any other services required for the project, managing suppliers and contracts. The equipment supply and Services are contracted by the client.

Construction & Commissioning Management: One Solar manages the construction & commissioning phase, coordinating contractors, ensuring quality control, adhering to schedules, and managing on-site activities. One solar also manages all the regulatory commissioning process with the administrations and DNO/TSO on behalf of the client.

Description

1. Engineering Office: During the Procurement & Construction phases One Solar will be responsible for preparing every necessary technical document, drawing, and specification. This will consist of



Construction Engineering and As-built: This will include all construction engineering and As-built documentation, technical specifications, BOQs (Bills of Quantities), and the certified technical project

2. Supply & Installation Services Tender Management: One Solar will conduct a pre-selection round will be conducted, providing a shortlist of installation companies and equipment suppliers for the client to consider during the tender process. Additionally, the necessary technical documentation for the tender of various works will be prepared, and technical-economic comparisons of the offers received will be provided to the client, along with our recommendations.



Drafting the RFQs (Requests for Quotation) and preparing the technical annexes to be considered for the tender process.



Preparation of budget templates.



Validation of the list of subcontractors to be used in the project for the construction works.

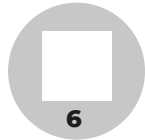




Launch and management of the tenders, leading the Q&A rounds.



Evaluation of bids and technical and economic comparison of the proposals received.



Review of the schedules received during the tender process.



Support for the client in contracting the works or procure the equipment, with special attention to matters related to guarantees, market prices, subcontractor insurance, suggested penalties, and work acceptance procedures

3. Construction Management

The construction management provided by One Solar will include :



Project planning and scheduling: Development of detailed timelines, definition of milestones and key dates, and resource allocation.



Supervision and coordination: Daily monitoring of construction progress, coordination between different subcontractors and suppliers, ensuring compliance with technical specifications and regulations.



Change and risk management: Identification and assessment of potential risks, implementation of risk mitigation plans, and management of change requests to the project scope.



Resource and logistics management: Coordination of material supply and delivery, ensuring the availability of necessary labor and equipment.



Contract and subcontract management: Administration of contracts with subcontractors, negotiation and resolution of contractual disputes, and monitoring of contract execution.



Financial management: Control and monitoring of the project budget, ensuring conformity and tracking payments to subcontractors.





Communication and reporting: Preparation of progress reports for clients and stakeholders, facilitation of coordination and progress meetings, and management of project documentation.



Engineering support: Technical office support during the construction phase.

4. Supervision and Quality Control: The objective of this task is to ensure the quality control and assurance of all activities during construction:



Quality Control Plan (QCP): Describes the procedures, standards, and quality criteria to be applied in the project. It includes the responsibilities of the quality control team and the inspection and testing activities.



Verification of subcontractor activities: Ensuring that subcontractors perform activities correctly and in accordance with QA/QC procedures and technical specifications, where quality requirements and criteria for materials, equipment, and construction methods are defined to ensure compliance with the project design.



Perform necessary inspections: Conduct inspections on completed works according to the Inspection and Testing Procedures (ITP), which describe the specific inspections and tests to be performed during construction, including testing methods, acceptance criteria, and inspection frequencies.

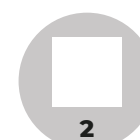


Manage non-conformities: Handle non-conformities with various subcontractors and provide regular reports to the client's project manager.

5. Facultative Project Director: Ensures that the project aligns with the legal, technical, and safety regulations, acting as the technical authority throughout the construction process:



Project Management: Oversee the approved construction project within the framework of the administrative permits, including any additional modifications. Ensures that the construction process follows approved plans, safety regulations, and material specifications and inspects the progress at various stages of construction.



Final Work Certification: Sign the Final Work Certificate.



Coordination of Changes: Manage any design or scope changes throughout the project.



6. Health and Safety Coordination: Ensures that all safety measures are followed during the planning and execution of construction projects. This role is critical for preventing accidents and ensuring a safe work environment. This role is legally required for construction projects in Spain, ensuring compliance with local health and safety regulations (Real Decreto 1627/1997)



Preparation of the Health and Safety Plan: Adapting it to the specific conditions of the site and ensuring compliance with current regulations.



Risk assessments: Conducting risk assessments before and during the project, identifying potential hazards, and proposing prevention and control measures.



Coordination of preventive activities: Ensuring that all companies and subcontractors involved in the project follow the established safety guidelines.



Supervision of compliance: Ensuring that all workers, equipment, and processes comply with applicable occupational health and safety regulations.



Training and safety sessions: Organizing and conducting health and safety training sessions for workers, ensuring they are informed and prepared to prevent accidents.



Site Access Control: Implement access control measures to allow entry only to duly authorized personnel.



Incident Logbook Management: Maintain custody of and record incidents in the Incident Logbook and notify the competent health and safety authority of any incidents.



Accident Response Advice: Provide guidance on measures to be taken in the event of an accident, as well as during inspections and actions conducted by the competent health and safety authority.



Coordination of H&S Meetings: Facilitate meetings with the health and safety representatives designated for each contractor or subcontractor on-site.



7. Environmental Supervision Management: Ensures that the project complies with environmental regulations and sustainability practices. The primary objective is to confirm that the requirements from the environmental authorities are followed during the construction, operation, and decommissioning of the projects.



Regularly monitoring the environmental conditions during all project phases and ensure that compensatory and corrective measures outlined in environmental permits are followed during construction.



Provide monthly reports to be submitted to authorities to demonstrate compliance with the permits, ensuring transparency in environmental practices.

8. Commissioning Supervision: Ensures that the cold and hot commissioning phase is carried out correctly and in accordance with applicable contracts, standards, and regulations. At the end of the tests, the results will be reviewed, and an opinion will be issued, including the One Solar recommendation for accepting or rejecting the works performed. In the case of rejection, the One Solar will explain the reasons and the corrective measures to be taken.



Management of cold and hot tests performed by the sub-contractors and equipment suppliers (SAT). Test reports review and analysis.



Management of regulatory OCA tests. Test reports review and analysis.



Management of the plant commissioning process, ensuring compliance with regulatory and safety standards.



Review and validation of sub-contractor's punch list to transfer it to the O&M team upon handover.

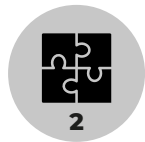
9. Administrative Process for Commissioning: Carry out the administrative procedures with the TSO (REE), DNO, and the various authorities (central, regional, municipal) on behalf of the client. These procedures include, among others:

Commissioning Process with the TSO (REE):



Processing of EON (Operational Energization Notification), ION (Initial Operational Notification), ApesP (Approval of Pre-operational Testing), First Injection Certificate, and finally FON (Final Operational Notification).





Management and handling of all associated sub-processes, such as the registration of the connection point, supervision of communication tests, inspection and verification of the metering point, and processing of the CIL certificate.

Administrative Process:



Processing of Initial /Final Administrative Authorization for Operation



Preliminary / Final Registration with Raipée



Processing of the Activity License (Municipal)



Processing the return of the Grid Bond



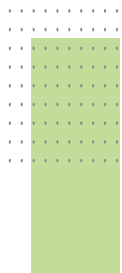
Process with the Distribution Company:



Request for the CTA and obtaining CUPS for generation and auxiliary services (SSAA).



Support with the auxiliary services (SSAA) supply contract.



PV Equipment Procurement Services

Modules currently represent about 25% of the total construction cost of a photovoltaic plant. When factoring in inverters and solar trackers, this percentage exceeds 50%. At One Solar, we assist our clients with the direct purchase of this equipment, helping to reduce construction costs. We also ensure that, under the BOS (Balance of System) contracting terms, the service provider takes responsibility for the plant's performance guarantees as well as the O&M (Operations and Maintenance) services for this equipment.

Our specialized Procurement advisory team can assist with this, leveraging our close relationships with leading PV equipment manufacturers, deep technical expertise, and extensive experience in the construction and commissioning of PV projects.

We refine technical requirements and specifications, prepare tenders, and manage procurement processes while staying closely connected with Tier 1 PV manufacturers. We help customers define specific needs and technical specifications to identify the most suitable PV equipment at the best possible cost. Additionally, we support customers in negotiating supply contracts and offer quality control services at origin and destination, along with assistance during FAT (Factory Acceptance Tests), to ensure the equipment's quality.

Description

1. Definition of PV Requirements & Preparation of Tender Documentation



Expert advice and insights on the best PV components available in the market.



Specification of Requirements: Define needs and product specifications for PV components (Minimum Technical Requirements), tailored to the project's specific needs.



Pre-selection of top Tier 1 suppliers in collaboration with the client.



Preparation of tender documentation, including Instructions to Bidders, Bidding Procedures, Preliminary Design, Project Description, Project Schedule, and Bidding Templates.



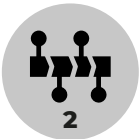
2. Tender Management



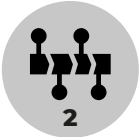
Full management of the tender process (RFP) with direct engagement with suppliers.



Definition and alignment of the supplier evaluation matrix (considering quality, price, degradation, warranties, etc.).



Technical support during Q&A phases.



Offer Evaluation: Detailed analysis of product warranties and benchmarking of offers.

3. Support in Acquisition Negotiations & Supply Contract Review



Legal and technical support during contract negotiations and warranty agreements.



Review of technical annexes (compliance guarantees, quality standards, etc.).

4. QA/QC Services at Origin & Destination



Factory audit.



Continuous auditing of agreed production lines (daily material and process inspections, in-line measurement verification, container loading inspection).



Assistance during FAT (Factory Acceptance Tests).



On-site tests through mobile laboratory and drone thermal inspections.



CASE STUDY

M&A, Procurement & Construction Advice Services



Puerto Real 3 PV Plant 50MWp

Performed independent Technical Due Diligence and structured the asset transaction for MET Energy Holding. One Solar supplied full advisory services for contracting of EPC services of the PV Plant and Substation position analyzing proposals from reference EPC companies in Spain and Europe and recommending the most adequate one by balancing the technical and economical aspects and providing support during the contract negotiation. We supplied also Construction supervision services till the Project commissioning and PAC.



Technical Due Diligence

Technical Due Diligence and independent audits before project acquisitions or sale to establish true value.



Procurement

EPC RFP Documental Package & Tender Management. Technical and Economical benchmarking of the bidders. EPC Contract closing support



Asset Transaction

Analysis, structuring and management of the Plant transaction.



Construction Supervision

Construction Engineering review, Owner's site management, Electrical, Mechanical & Civil Quality Supervision, H&S Coordination, Commissioning Supervision.



CASE STUDY

Project Optimization and Procurement Services

LEALIA ENERGIA

Pipeline of four projects with > 68 MWp

Provided engineering services for project optimization, along with comprehensive advisory support for the contracting of EPC services for PV plants and evacuation systems. This involved analyzing proposals from leading EPC companies in Spain and recommending the most suitable option by balancing both technical and economic factors



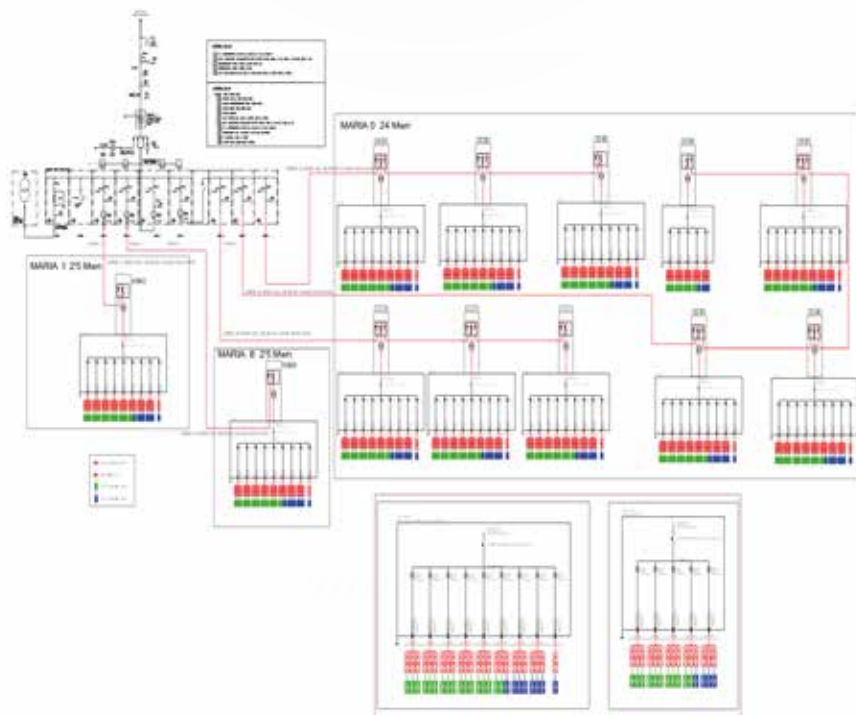
Project optimization

Review of preliminary project and information used to obtain the administrative permits and performed optimization tasks to increase Yield & reduce LCOE



Procurement

EPC RFP Documental Package & Tender Management.
Technical and Economical benchmarking of the bidders.
EPC Contract closing support



BESS & PV Procurement Track Record

Type	Year	Country	Size (MW/MWh)	Description
Hybrid PV + BESS	2019	USA	100/200	Complete integrated system Hybrid with PV. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2020	UK	50/50	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2020	UK	40/40	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2021	UK	50/50	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2021	UK	50/50	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2021	UK	50/50	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
BESS Standalone	2022	UK	50/50	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder
Hybrid PV + BESS	2022	Portugal	50/100	BESS system added to existing PV system. Defined RFQ Process, and appropriate bidders (Delayed due to Funding).
BESS Standalone	2024	UK	30/60	Standalone BESS System. RFQ Process, Contract Review and/or Negotiation with winning bidder (In process).
BESS Standalone	2024	UK	2GWh	Frame Agreement for Multiple Systems from 100-400MWh. RFQ Process, Contract Review and/or Negotiation with winning bidder (In process).
BESS Standalone	2024/Future	Spain	500MW	Complete Project Development of 500MW of BESS projects. Full development of permits and engineering in progress. Procurement will be managed as development advances.

Type	Year	Country	Size (MW/MWp)	Description
PV only	2023	Spain	44/49.9	PV plant in Jerez de la Frontera. Full EPC RFP Package, Tender Management (Installed & Operating).
PV only	2021	Spain	44/49.9	PV plant in Jerez de la Frontera. PV module & BOP RFP Package, Tender Management (Installed & Operating).
PV only	2020	Spain	110/133	PV plant in Jerez de la Frontera. Full EPCM, Procurement, Construction (Installed & Operating).
PV only	2019	USA	650MWp	PV plant in Texas, US. Led procurement for main equipment: PV modules, trackers, and inverters.
PV only	2018	Portugal	200/221	PV plant in Vaqueiros. Full EPCM, Procurement, Construction (Installed & Operating).
PV only	2017	Portugal	40/46	PV plant in Baixo Alentejo. Full EPCM, Procurement, Construction (Installed & Operating).
PV only	2015	UK	35/39	PV plant in North Lincolnshire. Full EPCM, Procurement, Construction (Installed & Operating).
PV only	2014	UK	5.5/6.0	PV plant in Carmarthenshire. Full EPCM, Procurement, Construction (Installed & Operating).
PV only	2014	UK	8/8.4	PV plant in Westbury. Full EPCM, Procurement, Construction (Installed & Operating).

