

# Engineering and construction management services

For photovoltaic solar plants



## Profile



- Ecosolutions engineering & construction management services offers to developers and EPC the opportunity to externalize the costs of the engineering and construction management of photovoltaic plants
- The services offered starts in the advice, studies and feasibility analysis and scope until the exploitation and the maintenance, passing through, the engineering and the construction of these solar plants
- Availability of our services throughout Greece. Other destinations on request

## Engineering

Feasibility studies, basic & executive projects

- – Design of the photovoltaic generator
- – Generator layout
- – Configuration of the photovoltaic fields: definition of the series, inverters and supporting structures or trackers
- – Analysis of losses, minimization:
- Analysis of shadows
- DC and AC cabling design
- – Design of evacuation lines
- – Design of electrical protections and earthing system
- – Design of lanes, drains, structures, foundations, etc.
- – Design of auxiliary systems: monitoring and security & surveillance
- – Project report and graphic documentation, adapted to local legislation and
- regulations

## Construction management

### Follow-Up of Work Execution

- The goal of the Follow-Up of Work Execution is to promote and to watch over the execution of the works on the part of the contractor and in accordance with the Plan of Execution and the Contract of Delivery
- Keeping vigil for that the work is executed guaranteeing some, with a degree of sufficient confidence, that all the characteristics of the work agree with the Technical Conditions.
- Keeping vigil for that the execution of the work is made in the deadline and with the cost foreseen.

## Construction management

Activities and actions :

a) Re-evaluation

- Follow-up of the re-evaluation and formulation of the Minutes of reevaluation
- Follow-up of initial works

b) Follow-up of work execution

- Establishing periodic appraisals of the executed work, from the measuring of the units of work
- Delivery, with the established periodicity, of systematic and analytical reports on the execution of works: results of control and fulfillment of the planning, problems detection and solving: measures taken or proposed ones to avoid or to minimize problems



## Construction management

### c) Quality Assurance of the Works and the Assembly

- Reception of the photovoltaic modules: analysis of power deviations, check of the margins of tolerance. Acceptance if it suits or immediate report in the event of no acceptance of the modules
- Follow-up and inspection of the assembly of photovoltaic fields: modules, structures/trackers, wirings, protections, transforming station, lines and other elements of the PV generator
- Detection of No Conformities: Corrective and preventive actions

## Our Expertise

- Engineering & Construction management Experience:
- Development of more than 25MW, in Greece
- Installations of more than 2 MW, in Greece, of on ground grid connected PV plants, both fixed and 1 or 2 axis trackers
- Feasibility studies and basic projects of more than 60MW, of grid connected PV plants
- **Consulting Experience:**
- Advising solar developers in the construction, financing and operation of 2 axis trackers, on ground, PV plant, Roof PV Plants
- Advising local government for the feasibility studies of CSP 50 MW and CSP 20 MW plants on Crete
- Feasibility studies

Contact us

# Ecosolutions

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