



# PLANET – P<sup>L</sup>an for Agriculture reNewable Energy Training

---

## Table of Contents

|   |                          |   |
|---|--------------------------|---|
| 1 | MODULE DESCRIPTION ..... | 2 |
| 2 | OUTLINE.....             | 2 |



UNIVERSITÀ  
DEGLI STUDI  
DI TORINO



Confagricoltura  
We Grow Masterpieces



INFOR·ELEA  
Smart Business Academy



TECSOL  
Bureau d'études techniques en énergie solaire





# PLANET – PPlan for Agriculture reNewable Energy Training

---

## 1 SOLAR photovoltaic Module description

The Solar Photovoltaic training course consists of 6 days of training, both in-class, online and on-field (with a site visit of a operating power plant). The module starts with an introductory chapter which should allow the students to understand the applications of solar energy as well as the roles of all actors involved in a solar plant project. The module continues with a presentation of technical equipment of a power plant and the influence of the local law and regulation on the applications. The students will then learn the basic rules of design of a power plant. Day 4 consists of a site visit where students will discover an operating plant and how the information learned in the previous days are applied on-field. They will also apprehend safety and health regulation as well as the steps of Operations and Maintenance. Day 5 presents the method for evaluation of the economical benefits of a power plant and, finally, Day 6 is a presentation of how to run a power plant through troubleshooting, maintenance and recycling phases. With the knowledge of the course, the student get the ability to review the design of a solar power plant according the present framework to allow a sustainable economical operation of the plant.

## 2 Outline

| Module 2 | PLANET Solar photovoltaic training course   | Bloom Taxonomy level | Test type          |
|----------|---|----------------------|--------------------|
| Day1     | <b>Entrance Test &amp; Introduction</b>   |                      |                    |
| LO1      | Know the best solar applications for farmers and the influence of the regulation                                      | remembering          |                    |
| LO2      | Know the necessary health, safety, hygiene, and environmental standards and legislation rules in the solar PV sector. | remembering          |                    |
| LO3      | Understand the steps of design of a solar power plant: from the feasibility study to the project supervision.         | understanding        | Multiple questions |
| Day2     | <b>Renewable energy: Environmental sustainability and market potential</b>  |                      |                    |
| LO1      | Know the Equipment and Implementation of a Solar photovoltaic plant   | remembering          |                    |



# PLANET – PPlan for Agriculture reNewable Energy Training

| <b>Module 2</b> | <b>PLANET Solar photovoltaic training course</b>   | <b>Bloom Taxonomy level</b> | <b>Test type</b>              |
|-----------------|--|-----------------------------|-------------------------------|
| LO2             | Know the Law & Regulation behind of a Solar photovoltaic plant   | remembering                 | Multiple questions            |
| <b>Day 3</b>    | <b>Equipment, Law &amp; Regulation and Design</b>  |                             |                               |
| LO1             | Check with Day 2 “Equipment” is understood   | remembering                 |                               |
| LO2             | Check with Day 2 “Law & Regulation” is understood  | remembering                 |                               |
| LO3             | Be able to pre-sizing a solar PV plant and choosing the optimal valorization scheme  | applying                    | Practical test                |
| <b>Day 4</b>    | <b>General and Specific education on Safety and Health</b>   |                             |                               |
| LO1             | Understand how to run a solar photovoltaic power plant   | understanding               | Practical test with interview |
| <b>Day 5</b>    | <b>Design &amp; Economy</b>  |                             |                               |
| LO1             | Evaluate the opportunity and the economy of a solar photovoltaic plant   | evaluating                  | Report                        |
| LO2             | Design a solar PV plant as a group assignment  | applying                    | group assignment              |
| <b>Day 6</b>    | <b>Run of a power plant</b>  |                             |                               |
| LO1             | Identify, troubleshoot and report equipment damage and malfunctions; know the major failures of the system and how to react and understand the Compliance with Environmental Legislation | applying                    | Practical competence test     |