



RICHEL®
GROUP

PHOTOVOLTAIC POLY GREENHOUSE

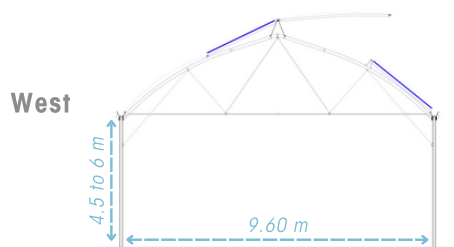
RICHEL SOLAR





Richel Group positions itself as an essential partner for **cultivating crops while generating watts** through the photovoltaic poly greenhouse: a diffusing film, flexible positioning of roof panels and an **adaptable shading ratio**.

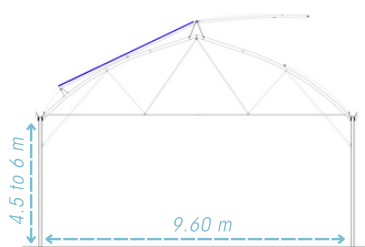
RICHEL SOLAR solves a challenging equation: sustainable, local production of fruits and vegetables, coupled with green electricity generation.



1 row of panels on 1 or 2 sides

Orientation : East/West

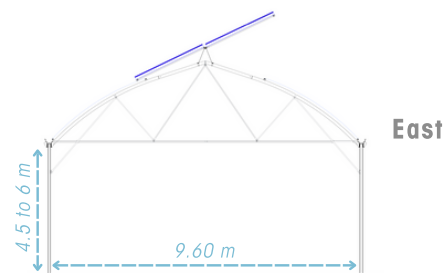
Significant light entry, well distributed over the zenithal (possible option: double inflatable walls).



2 rows of panels on one side

Orientation : West (potentially South)

Significant sunlight in the morning, when the plant is most receptive and shading in the afternoon to prevent overheating and delay or eliminate seasonal whitening.



panels on vents with "tracker"

Orientation : East/West

North/South orientation of crops and maximized energy production through tracker openings.

Versatile configurations:

- Shading (from 16 to 42%).
- Perfect integration and variable arrangement of roof panels.
- Different orientations of the greenhouse.
- Option: crop supports and/or hanging gutters.

RICHEL SOLAR is able to offer **more than 20 mol/m²/day from May to August** with a configuration of 32% shading facing west.*

The optimal placement of panels and the high-diffusion plastic film covering ensure a **light uniformity of over 93%***

In west-facing configurations, **between 55% and 60% of the DLI** (Daily Light Integral: the amount of light received by the plant in a day) enters the greenhouse before noon*.



Optimization of **morning light penetration**,



Protection against afternoon overheating, preventing whitening.

An ideal combination.



Light



Electrical production



Crop yields



Energy saving

*Results of a study on the photosynthetic radiation captured by a Richel Group plastic greenhouse equipped with photovoltaic panels. The study was conducted in the city of Agen (France) by an independent organization.

