



Alzira Town Hall



Operazione co-finanziata dall'Unione Europea, Fondo Europeo di Sviluppo Regionale, dallo Stato Italiano, dalla Confederazione elvetica e dai Cantoni nell'ambito del Programma di Cooperazione Interreg V-A Italia-Svizzera. (Codice progetto 603882)

Introduction

The patio of the Alzira Town Hall in the Valencia area was renovated by integrating BIPV modules in a skylight.

Aesthetic integration

The photovoltaic skylight has a uniform appearance thanks to the thin amorphous silicon film in the BIPV modules.

Energy integration

The estimated photovoltaic production is approximately 1,000 kWh per year. The energy produced is partially stored in an electric storage system to be then used by the various systems in the building and partially transferred to the network.

Technology integration

The BIPV (Onyx Solar) modules are the glass-glass type and have a thin inner amorphous silicon film with 10% semi-transparency (M-vision). The skylight allows light to pass through, providing natural illumination to the patio below while ensuring a solar factor (g) between 5% and 40%, making it an excellent choice for preventing the greenhouse effect, especially in a hot climate such as that found in Valencia.

Lessons learnt

It is estimated that the energy produced can prevent the emission of almost one tonne of CO₂ per year.

PROJECT DATA

Project type	renovation
Building use	institutional
Heritage constraint	listed building
Building construction technique	pre-industrial
Building address	Carrer Sant Roc 6, Alzira, Valencia, Spain

BIPV systems

BIPV SYSTEM DATA

Architectural system	Skylight
Integration year	2011
Active material	Amorphous silicon
Module transparency	semi-transparent
Module technology	glass-glass, hidden PV, standard modules
System power [kWp]	5.1
System area [m²]	112
Modules tilt [°]	0
Annual FV production [kWh]	7402

BIPV SYSTEM COSTS

Stakeholders

BIPV system designer

Onyx Solar

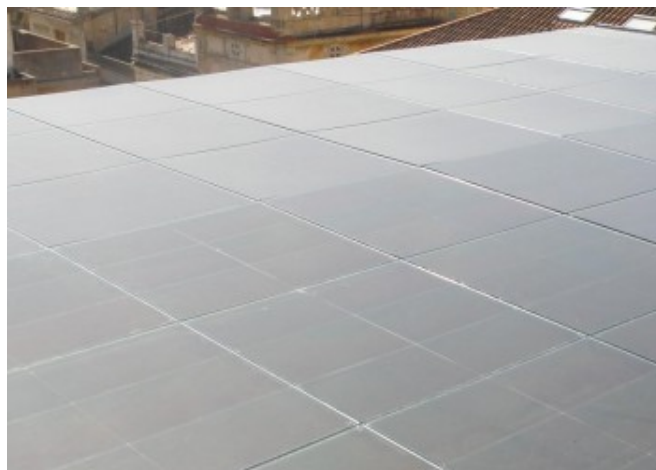
BIPV components producer

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