



Linares 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 Linares Town Hall is a historic 19th century building, which symbolises the city. The BIPV system was integrated by replacing an old glass roof during the building renovation and expansion.

Energy integration

The photovoltaic production is estimated to be approximately 5,950 kWh per year. The building's consumption related to the heating, cooling, and ventilation systems is reduced by 62 %.

Technology integration

48 glass-glass photovoltaic modules (Onyx Solar) make up the new roof of the Linares Town Hall. Rectangular and triangular, and of various sizes, they are attached to a steel structure. Interspersed polycrystalline silicon photovoltaic cells are inserted to act as sunlight shields. Low emission glass is used. The overall thickness of the packet is 12 millimetres.

Lessons learnt

The energy produced is estimated to be equivalent to 122 barrels of oil. This should prevent the emission of 118 tonnes of CO₂ into the atmosphere.

PROJECT DATA

Project type	renovation
Building use	institutional
Heritage constraint	listed building
Building construction technique	industrial
Building address	Plaza del Ayuntamiento, Jaén, Spain

BIPV systems

BIPV SYSTEM DATA

Architectural system	skylight
Integration year	2015
Active material	polycrystalline silicon
Module transparency	semi-transparent
Module technology	glass-glass, recognizable PV, customized modules
System power [kWp]	5
System area [m²]	80
Module dimensions [mm]	Several
Modules tilt [°]	0
Annual FV production [kWh]	5950

BIPV SYSTEM COSTS

Stakeholders

Main building designer

Arch. Andres Lopez Fernandez

BIPV system designer

Onyx Solar

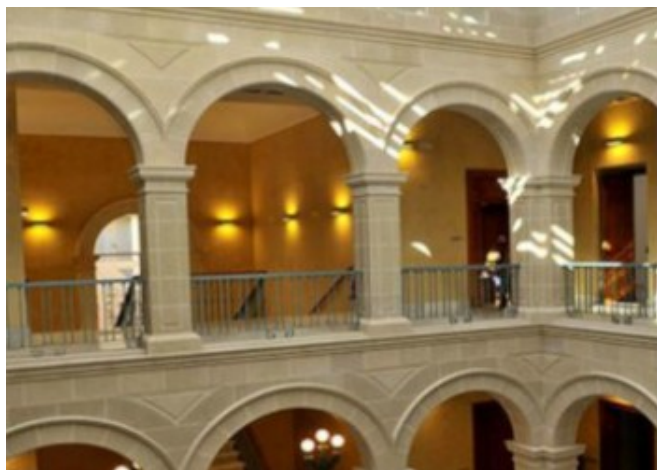
BIPV components producer

Onyx Solar

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Portico with the BIPV skylight © Onyx Solar



Close-up of the BIPV skylight from below © Onyx Solar



Close-up of the BIPV skylight from outside © Onyx Solar

Case study author:

Eurac Research