University of Applied Sciences and Arts of Southern Switzerland
Department of Environment Constructions and Design
Institute of Applied Sustainability to the Built Environment

SUPSI

Swiss BiPV Competence Centre

Warm facade

Louvres Balcony

WSPiA School of Law and Public Administration Rzeszow(P)

Building Details

CONTACTS	Name	Website (or e-mail)
Owner	WSPiA School of Law and Public Administration - Branch of Rzeszow	www.wspia.eu
Architect	-	-
Energy Consultant	Ertex Solar GmbH	www.ertex-solar.at
PV Installer	ML System LTD	www.mlsystem.pl

BUILDING

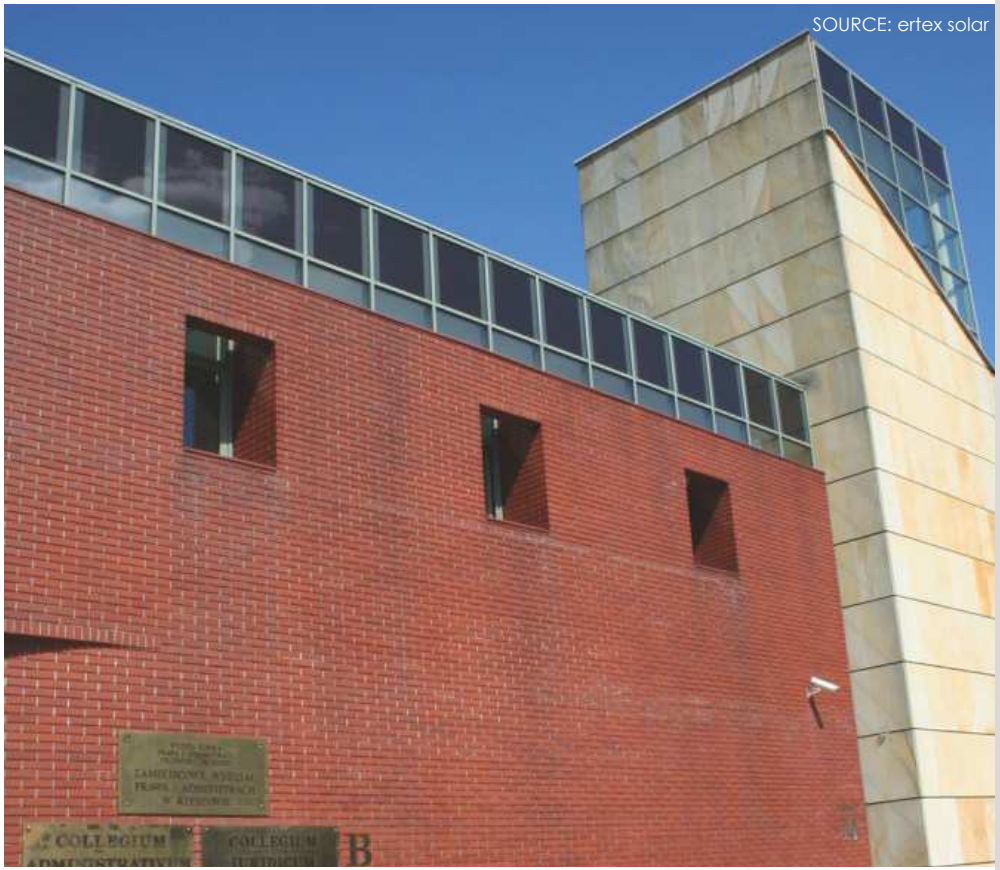
Completion year	2011 Building		2011 Plant	
Category	New	Renovation	Enlargement	Other
Typology	Residential	Administration	Industrial	Sport
	Agricultural	Urban	Historical	Other

Building Energy Performance **kWh/m² y**

Description

The project of WSPiA School for Law and Public Administration is the first installation and one of the bigger PV plants in a school building in Poland. This allowed to reduce 10% heat and electricity consumption. The energy produced is used to light building and to power the air conditioning system, also including 30 geothermal probes 125 m depth. The semi-transparent PV panels are installed with an independent system hooked through metal structures and "spiders" joints on the opaque wall completely . Other PV panels are integrated in the curtain wall of the Administrative Juridical College and in the building envelope of the tunnel connecting the buildings. In 2014 the PV was enlarged through the installation of 40 solar carpots for charging electric cars. The 840 m2 of new PV system corresponds to 170 kWp peak power.

Aknowledgments -



SOURCE: ertex solar

BiPV Details

LOCATION OF PLANT

Roof	Flat roof	Sloped	Curved	
Façade	Cladding	Balcony	Greenhouse	Curved
Glass	Façade	Roof	Solar shading	Canopy
Orientation	South	West	East	North
BiPV System	Fixed shading device Trasparent Façade (curtain wall).			

ARCHITECTURAL EVALUATION

Color	Black
Transparency	Semitransparent (shading device); opaque (curtain wall);
Frame	Transparent band contour panels of shading device; Steel frame of curtain wall.

COSTUMIZATION LANGUAGE AT COMPONENT SCALE

PV CELL	**MODULE LAYERING**	**MODULE FEATURES**	**DUMMIES**

DESCRIPTION Different dimensions of Pv panel

SPECIFICATION

Photovoltaic	Monocrystalline	Multicrystalline	Thin Film	
PV Module	**Cells**	-		
	Module	228 VSG-ISO glass-glass (Different dimensions)		
Power	**kWp**	18		
Size	**m²**	200		
Energy production	**kWh/year**	-		
Cost	**€/m²**	-		