



Single-family house Bianda



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 single-family house Bianda, of the homonymous family, was built in 1930. In 2020 it was subject to renovation and energy refurbishment. The envelope thermal insulation has been significantly improved. The total energy demand was reduced from 46,500 to 25,300 kWh/a, thanks to the installation of energy-efficient devices and appliances. A BIPV system is integrated in the roof. The building was awarded the Swiss Solar Prize 2021.

Sources: 3S Solar Plus AG, [Schweizer Solarpreis 2021](#)

Aesthetic integration

The BIPV modules, made of tempered glass, cover almost the entire roof of the house, forming a uniform surface.

Energy integration

The BIPV system generates 22,100 kWh per year, covering 87 % of the building's electricity needs.

PROJECT DATA

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| Project type | renovation |
| Building use | residential |
| Building construction technique | industrial |
| Building address | Via Locarno 34, Losone, Switzerland |

BIPV systems

BIPV SYSTEM DATA

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|------------------------------------|--|
| Architectural system | opaque roof |
| Integration year | 2020 |
| Module transparency | opaque |
| Module technology | glass-backsheet, recognizable PV, customized modules |
| System power [kWp] | 23.54 |
| System area [m²] | 168 |
| Modules orientation | West, East |
| Annual FV production [kWh] | 22100 |

BIPV SYSTEM COSTS

Stakeholders

BIPV components producer

3S Swiss Solar Solutions AG
Schorenstrasse 39, Thun, Switzerland
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<https://www.3s-solar.swiss/it/?hsLang=it>

Collaborators

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