

Bale, Feldbergstrasse: zero energy renovation – built 1896 / renovation 2009
Watt d'Or 2010 (BFE) category Reconstruction



Romanshorn: Plus energy renovation with PV-facade – built 1961 / renovation 2012
Norman Foster Solar Award 2013 and European Solar Price 2013



Bale, Feldbergstrasse: zero energy renovation
Only 100 m² roof for thermic suncollectors and photovoltaic for 6 floor levels

Energy consumption before renovation **223'000 kWh**

reduction of CO₂ Emission:
88 % less

reduction of energy consumption:
94 % less

to **14'300 kWh**

non renewable energy consumption for heating, hotwater, cooling incl. energy for household
E_e 13,6 kWh/m²a EBF (electricity)
 or
795 kWh/person and year



Flums: Plus energy renovation of an office building – built 1984 / renovation 2014
Photovoltaic integrated on the facade (414 m²) and flat roof (403 m²)

