

Case Study

BELECTRIC

Warehouse Kolitzheim



Kolitzheim, Germany



This rooftop installation on the BELECTRIC warehouse is a successful example of how to use industrial rooftops for ecological power generation. (Image: BELECTRIC)

Site Overview

Location	Kolitzheim, Germany
Coordinates	49.9° N, 10.2° E
Average global irradiance	1,105.30 kWh/m ² /yr
Average temperature	8.96 °C, 48.13 °F
Average precipitation	577 mm/yr, 22.74 in/yr

Technical Overview

Date onstream	July 2011
System capacity	554.58 kWp
Panel type	SF130-L (130 W)
Number of installed panels	4,266
Tilt angle, orientation	8°, 35° different to south
Expected output	540,715.50 kWh/yr
Total CO₂ reduction	369,000 kg/yr, 813,505 lbs/yr
Inverter	30 x SMC 11000TL - 10 18 x SMC 10000TL - 10 1 x Tripower 17000 TL - 10

Financing Bank

UniCredit Leasing

"The photovoltaic rooftop installation on our new warehouse is a successful example of the use of large roof areas for modern and ecological power generation. Solar Frontier's CIS thin-film modules are suited perfectly to this rooftop because of their better light efficiency even in the case of low tilt of our warehouse. Already weeks after start of operations the output was superior than expected."

*Martin Zembsch, Managing Director
BELECTRIC Trading GmbH*

BELECTRIC Solarkraftwerke GmbH, headquartered in the Photovoltaics Center of Kolitzheim in Schweinfurt, is a market-leading designer, manufacturer and constructor of ground-mounted solar power plants. BELECTRIC employs more than 1,600 people in 15 nations and has been active in the power plant segment since 2010. Among the company's strengths is its expertise in manufacturing BOS equipment.

At BELECTRIC headquarters, engineers and technicians research in different fields of interdisciplinary photovoltaics to develop leading technologies for increasing the economy of power generation for the future. The team constructs photovoltaic systems from planning, to installation, to maintenance, thereby ensuring efficient and long-term operations. When BELECTRIC decided to add warehouse capacity for fast and reliable delivery to customers, it chose Solar Frontier CIS thin-film modules. High module efficiency and environmental friendliness, underscored by meeting RoHS standards, were keys to the decision.

With a total capacity of 555 kWp, the installation covers the yearly energy needs of approximately 180 Four-person households and reduces CO₂ emission by 369 tons per year. The uniform black surface of the system integrates well with the appearance of the building and the surrounding landscape.

About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions, on the world's largest scale. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit www.solar-frontier.com