



GRI 305:
Emissions

Sustainable production at Klingele – powered by the sun

- 4 PV systems with a total output of 3,801 kWp
- Consumption of external electricity reduced from 77% (2000) to 47% (2017)
- More independence from volatile energy markets
- Plants Delmenhorst and Werne: 20% self-sufficiency with energy
- CO₂-emissions reduced by 1,100 tons (group-wide)

Powered by the sun: Solar energy strengthens independent energy supply

Case Klingele Papierwerke, Germany

Photovoltaics (PV) have attracted the attention of citizens, businesses and governments all over the world. According to the industry association Solarpower Europe, the solar industry managed to penetrate a magical frontier with a global expansion of 102.4 gigawatts in 2018. With 11.3 gigawatts, the PV market in Europe recorded growth of 21%; for 2019, Solarpower Europe even predicts an increase of 80% to 20.4 gigawatts.

Germany is the largest PV market in Europe – and will remain so in the next few years. Klingele implemented its first system at its headquarters in Grunbach back in 2009, meaning that the company can still benefit from the high feed-in tariffs granted during the introduction of the EEG subsidy in Germany. All of the electricity generated by this system is therefore fed into the grid. Since the feed-in tariffs were successively reduced

and are now well below current electricity prices, the motive of self-sufficiency now prevails. For this purpose, the new paper warehouse in Grunbach will now be equipped with a cutting-edge system with a capacity of 238 kWp (kilowatt peak: indicates the maximum output in kilowatts (kW) a photovoltaic system can provide). Parallel to this, the construction of a new logistics centre at the Werne site will give Klingele the opportunity to structure its energy supply in a more sustainable and cost-efficient manner. Here, first the old and then the new hall will receive a new PV roof. Together, both systems will deliver a total output of 1.5 MW. In Delmenhorst, Klingele “crowned” its new bulk storage warehouse with a PV system in 2016.

These are investments that certainly pay off – even if Germany isn’t exactly fringed by the Mediterranean. Klingele has reduced its external electricity consumption

from 77% in the year 2000 to 47% in 2017, thus becoming less dependent on fluctuating prices on the energy market. In Delmenhorst and Werne, for instance, the new systems will enable Klingele to provide up to 20% of its electricity supply itself, saving approx. EUR 165,000 per year in each plant. Through its own generation of clean energy, Klingele also reduces its environmental burden by saving 1,100 tonnes of CO₂ emissions across all plants.

Reason enough to continue to exploit the sun as an energy source. And if we turn to the topic of electromobility, Klingele already has a charging infrastructure for electric vehicles at its headquarters in Grunbach. After all, it is widely known that e-mobility is only truly sustainable when based on clean energy. Klingele is creating framework conditions to make this happen – today.