

# Letten Winery Switzerland

What's most important for us is that we don't just talk about the transition to renewable energy. We are guests on this planet. So we need to act and work hand-in-hand with nature," says Swiss entrepreneur Karl Sigrist. In the past, wood from the property's own forest used to be the main source of energy. But the expanded business has a much higher energy demand now.



Karl Sigrist  
Letten Winery

## Opportunity

Determined to still cover the increased energy need locally after the company's successful expansion (now up by approx. 15,000 kWh/year), as environmentally friendly and efficiently as possible, Karl and Cornelia Sigrist had to break new ground: They needed to find a solution that was both cost-efficient and ecologically sound.

## Solution

After careful consideration, the Sigrists opted for solar energy: A photovoltaic system, combined with Tesla Powerwalls as battery storage. Additionally, they also use liquid gas for the rather energy-intensive distillery. In addition to the 80 kWp photovoltaic system installed in spring 2019, they replaced the old heating with an air-to-water heat pump that can be operated with self-generated electricity also thanks to Powerwall. In September 2020, 7 Powerwalls with 13.5 kWh capacity each were installed.

## Result

Whereas previously about two thirds of produced solar energy were fed into the grid, they can now use a substantial part of the energy themselves. Since the installation of 7 Powerwalls, the family-owned company has managed to meet up to 80% of the increased energy demand (approx. 4,500 kWh/month). A significant increase compared to approx. 33% self-consumption without battery storage. The amount of additional energy imported from the grid is down by around 90% compared to 2019. The photovoltaic system with a power of 80 kWp produces an average of 6,000 kWh per month. In addition to the significant cost savings, the new energy set-up is an important step towards greater efficiency and more sustainability.

## Project Location

Meggen, Lake Lucerne,  
Switzerland



## System Size

7 Powerwalls (94,5 kWh)  
80 kWp solar

## Applications

Energy independence  
Self-consumption

## Comissioned

September 2020