

Large-format power generation



Modern power generation: efficient solar systems on the rooftops of the large settlement Remishueb in St. Gallen, which produce 45% of their electricity consumption.

Solar systems in a large settlement

Such a large settlement with so many photovoltaic panels on the roofs can be seen very seldom in Switzerland: The professional solar project of the settlement Remishueb In the east of the city of St. Gallen includes many apartment blocks. It was very swiftly planned and implemented; From the idea to the concrete commissioning of the solar system, only about one year passed.

Those who drive through Switzerland occasionally see single-family and farmhouse houses with photovoltaic panels for generating electricity on the rooftops. There are still few in comparison to southern Germany, where such solar systems can be visited on countless houses. Fortunately, the environmentally-friendly idea of attracting the sun to produce electricity is finding more and more followers in Switzerland. In terms of pricing, too, a lot has been done in a positive way for end customers in recent times. The settlement created about 20 years ago Remishueb In St. Gallen is divided into various housing cooperatives with owners/tenants. In September 2012 all partner cooperatives were informed about the construction of a high-performance solar power plant and its financing. Gratifying: At the end of November all cooperatives agreed to the project with a very high percentage! The energy commissioner of the city of St. Gallen also supported the project actively. This resulted in a decrease in the solar power generated and an investment allowance from the Energy Fund of the City of St. Gallen. The condition was that the plant is registered with the Kev (cost-covering feed-in remuneration of the federal Government). According to Ulrich

Fagan, co-president of the Cooperative Association Remishueb, the building application was submitted to the Office for building permits at the end of December 2012. St. Gallen then made a number of requirements regarding a uniform appearance, optical improvement through blind modules, safety aspects and the like. Nevertheless, the plant was already finished on July 23, 2013 and produced approximately 40 to 45% of the electricity requirement of the superstructure.

Costs and amortization of the project

The production costs of the ready-to-operate plant are based on a good 600000 CHF. The city of St. Gallen supported the PV plants with an investment allowance of 10%. Thus, the remaining 540000 CHF. In the year the plant generates 206000 kwh of electricity and the average electricity price for a 4-room apartment without boiler in St. Gallen is 2014 0237 CHF. Thus the amortization is 48822 CHF per year. The investment is expected to be amortized in about eleven years. Of course you still have to add the interest on the capital and possible maintenance costs. In contrast, the St. Gallen Municipal works of the superstructure per kwh 0.30 CHF and the plant produced in the first year 6.5% more electricity. The plant is well on track to be amortized in ten to eleven years. Considering that the life expectancy of the plant is 25 to 30 years, it is not only an ecological contribution to the environment, but also a very worthwhile investment facility.

Quality: Premium

The residents decided to buy exclusively European components and systems. The quality requirements in the project generally moved in the premium segment. Not the motto "Avarice is Awesome" was in the foreground, but efficiency. Also, it should not be used simply the cheapest material. In short: durability, reliability and fast deliveries came about, which finally paid off, as the very demanding solar power project could be planned and implemented within just one year. A small team was set up to use the human resources of the superstructure. These were people from the construction industry, the electrical engineer Louis Goldinger, those who worked at the city or the canton, and the pensioner Ulrich Fagan with the flexibility that led the team. In honorary engagement, they completed important work, eliminating the need for an external engineering office. This reduced the overall cost of planning, etc. Thus, all formalities and permits were quickly obtained and the construction of the plant could be commissioned. The data networking and the Internet presence were also created on their own. Smart: An external display is installed in the settlement, on which the power in Watts, the total energy in kw/h and the CO2 savings can be read at any time. The internet also has access to more detailed data on the system. So the residents are always up to date on the environmentally friendly solar project in their settlement.

Solar power for all

The solar power project presented concerns a large settlement. Of course, a smaller house/farmhouse can also be equipped with such photovoltaic installations. When solar technology was under discussion a few years ago, euphoric advantages (superhigh subsidies, etc.) were brought into the field, which then had to be adapted in the course of time to reality. Today, the initial hype has been reduced and one has reached the bottom of the

facts again. Prices have settled throughout Europe and now it is possible to expect further projects.



Clever: At any time the inhabitants of the settlement are informed about the current performance, total energy and CO₂ savings.

The Accutron AG in Bassersdorf is in cooperation with the Sumatrix AG provider of all types of solar systems. Not every house/hut in the mountains or in remote areas has a normal electricity connection. Here, electricity can be used via the sun, even if it does not always appear in Switzerland. There are sophisticated batteries that make caching efficient and inexpensive.

Accutron / August 04, 2014