

INNOVATION IN THE EAST

Apartment complex by the sea with roof-mounted PV system for hot water generation in Sochi, Russia

Sochi, Russia: the popular beach resort on the Black Sea is situated on the same latitude as Nice and is blessed with long, hot summers and mild weather in the winter and autumn months. The solar yield here is particularly promising, which was also why the owner of the apartment complex opted to produce their own electricity using photovoltaics.

Since August 2018, a PV system with Fronius Symo inverters has been meeting the household's energy requirements. Not only is the electricity generated from renewable sources, but hot water is also produced using solar energy. *"Since the start of 2019, roughly 90% of the energy produced has been consumed in the household itself. The Fronius Ohmpilot in particular is proving to be extremely cost-effective",* reports Denis Konyaev from Clever Energy LLC, a local Fronius Service Partner. *"Up to now, the pool was heated and hot water was generated exclusively using gas. Since the commissioning of the PV system, we have been able to reduce costs in this respect by 70%."*

THE SOLUTION:

/ Solar energy is used to heat the pool and generate hot water – 70% less gas is required

/ Intelligent load management results in optimized usage of consumers and increases self-consumption, saving money over the long term

/ Yields and consumption can be analysed precisely on the hour using the Fronius Solar.web online portal, revealing further potential in terms of energy consumption



SYSTEM DATA	SOCHI, RUSSIA
System size	15 kWp
Type of system	Roof-top installation
Inverters	Fronius Symo 15.0-3-M
Solution for heat generation	Fronius Ohmpilot For generating hot water and heating the pool
Savings	Cost of gas reduced by roughly 70%
Special feature	Intelligent load management optimizes energy consumption
Commissioning	August 2018

