With a growing black market in solar panels, solar farms in remote locations are vulnerable to vandalism and theft.

**SCENARIO**
The black market for solar panels is booming, particularly in Europe. It's a lucrative business — thieves sell the panels to nearby Eastern European countries, where strong demand has been created due to new feed-in laws. The theft of thermal collectors from a solar array impacts electricity production and are costly to replace.

Faced with ongoing vandalism and break-in attempts, one of Europe's largest solar farm operators sought an effective, all-weather, round-the-clock site monitoring solution for a number of their solar facilities across the country.

Because the solar farms are situated in remote locations, it was important that the system had the ability to differentiate between animals and intruders through the use of third-party analytics — sending alerts only in the event of an attempted theft.

**SOLUTION**
The solution proposed for the solar farms was Vumii Sii AT, a 24/7 outdoor camera used for observing and monitoring sensitive sites. "When selecting a viable perimeter security system for the solar farms, we focused on providing a total solution that was both effective and economical," said Rainer Boettcher, CEO of KB Videosystems, specialists in thermal cameras for industrial applications.
Thermal imaging camera systems provide an efficient solution day or night, delivering cost-effective total coverage. “In remote locations, the ability to identify potential threats and alert local police in a timely manner is essential to prevent ongoing damage and losses. One system delivers both monitoring and identification, substantially reducing both the purchase price and ongoing costs,” said Boettcher.

The Sii AT went through a testing process together with a competitive solution over several months. A key deciding factor was the proprietary Vumii Sensorii software, which enabled complete control of the engine core performance — parameters for each camera (such as NUC time, gain, region of interest, polarity, and more) could be set to deliver optimal performance. In addition, it also offered the ability to monitor multiple cameras from the same desktop, enabling operators to easily monitor unauthorized activity at the sites.

SUCCESS
The Sii AT cameras have been installed at all five sites and continue to perform well. The cameras deliver crisp and detailed pictures, enabling timely detection, recognition and response to suspicious perimeter events. Built to withstand harsh environmental conditions, the ruggedized Vumii Sii AT cameras provide a reliable solution, all year round. “The company’s hands-on support during the installation process as well as ongoing service and maintenance continues to be an essential element in the project’s success,” said Boettcher.