

JTI Turkey Selects SolarEdge for Smart Solar Investment

World-leading manufacturer Japan Tobacco International (JTI) traditionally promoted energy efficiency measures to meet its global carbon footprint reduction target. JTI Turkey ventured to be the first in JTI to diversify its energy supply with Renewable Energy by going solar. The energy from the 514kWp PV array installed on the roof of the new facility in Izmir has been designated for self-consumption to reduce electricity costs.

JTI's research on solar PV lead them to SolarEdge. With operations and maintenance as a top priority, JTI saw SolarEdge's free module-level monitoring, enabling remote troubleshooting and pinpointed alerts, to be a strong advantage. The fact that SolarEdge is a top-tier, bankable supplier, and that it is able to accelerate ROI with added energy thanks to reducing losses caused by mismatch, were also key considerations influencing JTI's decision. And because safety is a central focus at JTI, demonstrated through regular safety inspections by JTI Global, the ability of SolarEdge's SafeDC™ to reduce DC voltage to a safe level during emergencies was judged to be crucial to maintaining the company's high safety standards.

"JTI Izmir contracted Konar to deploy their solar PV array, and we jointly decided on installing SolarEdge solutions. Rather than looking to save in the short-term on their CAPEX expenses, JTI focused on deriving maximum value from their long-term investment."

Tolga Özdemir, CEO & Founder, Konar



Installation Date: March 2017

Japan Tobacco International (JTI) Torbali Izmir, Turkey

Peak Power: 514 kWp

Modules: 1836 x Hanwha Q-Cells 280 W

Power Optimizers: 918 x P600

Inverters: 18 x SE27.6K



The 514kWp solar PV system was installed on the roof of JTI Torbali's logistics center.

Design issues further reinforced JTI's decision when they discovered that in comparison to a traditional string inverter design, the SolarEdge system design reduced the number of strings from 92 to 54, requiring 4500m² less DC cable and enabling a savings of some €3,175.

Since entering the production phase, the SolarEdge solution harvests maximum power from the PV array, reducing the facility's dependence on electricity from the grid and maximizing ROI.

Comparison of Simulated vs. Actual Energy Production

| Month | PVsyst Simulation with SolarGIS Data (kWh) | Actual Production (kWh) | Difference |
|----------------|--|-------------------------|------------|
| June 2017 | 91,103 | 93,050 | 2% |
| July 2017 | 99,291 | 100,254 | 1% |
| August 2017 | 87,585 | 91,355 | 4% |
| September 2017 | 74,564 | 75,615 | 1% |
| October 2017 | 59,150 | 60,622 | 2% |
| November 2017 | 40,296 | 40,195 | 0% |
| December 2017 | 28,768 | 30,119 | 5% |
| January 2018 | 31,106 | 35,773 | 15% |
| February 2018 | 33,134 | 31,797 | -4% |
| March 2018 | 55,091 | 55,546 | 1% |
| April 2018 | 70,924 | 76,867 | 8% |
| May 2018 | 84,559 | 87,250 | 3% |
| Total | 755,571 | 778,443 | 3% |

We decided to go solar not only to demonstrate our commitment to renewable energy, but also to make a sound investment for the future. Partnering with SolarEdge, a solar company focused on safety, innovation, and maximum energy yield, with exceptional post-sales service, has already proven to be the right decision for protecting our investment."

Irfan Cinar, Electrical & Energy Associate Engineering, JTI Izmir

