

# Case Study

## BELECTRIC

### SIEIM Industrial Park Netanya



Ecological and economical harvest of energy from the powerful Israeli sun. (Image: BELECTRIC)

#### Site Overview

<b>Location</b>	Netanya, Israel
<b>Coordinates</b>	32.29° N, 34.87° E
<b>Average global irradiance</b>	1,950 kWh/m <sup>2</sup> /yr
<b>Average temperature</b>	21 °C, 70 °F
<b>Average precipitation</b>	550 mm/yr, 21.7 in/yr

#### Technical Overview

<b>Date onstream</b>	November 2011
<b>System capacity</b>	52.6 kWp
<b>Panel type</b>	SF150-L (150 W)
<b>Number of installed panels</b>	351
<b>Tilt angle, orientation</b>	15°, 23° SSW
<b>Expected output</b>	98.5 MWh/yr
<b>Total CO<sub>2</sub> reduction</b>	47,000 kg/yr, 103,600 lbs/yr
<b>Inverter</b>	SMA STP 17000 (x2) SMA STP 16000

#### Financing Bank

*"We are very glad to continue the good cooperation between Solar Frontier and BELECTRIC not only in Germany, but also here in Israel. Among the many advantages of Solar Frontier's CIS modules, we are most fascinated by their outstanding performance at high temperatures. Summer in Israel is very hot, so this module offers over 10% more energy than competition."*

*Gal Bogin, CEO BELECTRIC Israel Ltd.*

BELECTRIC Israel, a fully owned subsidiary of the global BELECTRIC group, plans, develops, builds and maintains turnkey solar systems in Israel. Moreover, BELECTRIC Israel does project planning and installation of solar systems in close collaboration with the headquarter of BELECTRIC in Germany with an experienced team of professional architects and engineers.

This 52 kWp PV rooftop solution premieres Solar Frontier's presence in Israel. Israel's coastal climate – hot, dry summers and cool, rainy winters – favor Solar Frontier CIS modules. In the summer months, when the module temperature quite often exceeds 75 °C, the module's high temperature stability assures top performance, whereas other modules rapidly decline. CIS technology has a lower temperature coefficient, smaller loss in conversion efficiency as temperature increases. In winter, superior yields can be expected, because Solar Frontier CIS thin-film modules perform well in low or diffuse light. These factors make Solar Frontier CIS modules the best choice.

The solar system is installed on a flat roof. In fact there is no connection between the system and the roof itself. The system is sitting on a special metal substructure (made of IPE beams and C profile templates) that is connected directly to the metal main columns of the building and the templates of the roof.

#### About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions, on the world's largest scale. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit [www.solar-frontier.com](http://www.solar-frontier.com)