



## Intersolar News: SolarEdge Snags BP Solar Deal

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[When we first wrote](#) about [Herzliya, Israel-based SolarEdge](#) late last year, we knew the company was gunning to tackle what's called partial shading — a problem whereby shade, dirt or shadow on just a few cells of a solar panel can disproportionately reduce energy output. Like National Semiconductor, SolarEdge had laid out a scheme for using electronics to monitor individual solar panel cells and boost efficiency. The idea is to allow unshaded cells to harvest energy at full throttle regardless of whether neighbors are compromised by shadow or other factors.



Today SolarEdge announced that BP Solar plans to develop modules embedded with its electronics, and it just started showing off its system for the first time at the Intersolar conference in Munich. So the 3-year-old startup is pulling back the curtain a bit more on its technology, strategy and challenges.

In a conversation with SolarEdge founder, Chairman and CEO Guy Sella last week, he emphasized that the company — which remains relatively small with only about 60 employees — started to develop its system shortly

before National Semiconductor came into the space with its SolarMagic devices.

Asked why SolarEdge has remained somewhat tight-lipped when it has as many as a dozen installations worldwide, Sella said the company wanted to secure a first-mover's advantage when it got started in 2006. He thinks SolarEdge has enough of a lead — in terms of gathering performance data from installations, forming partnerships, building relationships with integrators and advancing its technology — to beat out competitors at this point, but “From this point on, they are starting to close the gap.”

SolarEdge currently has three products, including a chipset called the PowerBox that manufacturers can embed into their solar modules to boost power output (the process is called [Maximum Power Point Tracking](#)), but can also be added on as a retrofit. There's also an inverter and web-based monitoring software for identifying maintenance needs and energy loss, and preventing theft. At this point, the company says it is delivering efficiency gains of up to 25 percent for residential and large-scale solar projects, up from the 15 percent to 20 percent efficiency improvements reported in December.

Sella said SolarEdge is on track to reach “general availability” between late July and September of this year. The company is in the final stages of negotiations with two manufacturers and expects to complete those by the end of June. By July, SolarEdge plans to establish a subsidiary in Germany, and by September or October Sella expects to have a presence in the U.S., on the West Coast.

Sella said the company can convert 80 percent of pilot users into paying customers within the next four quarters, which he says would deliver 80 MW worth of bookings. That doesn't mean money in the bank, however. “Revenue will be delayed by more or less two quarters,” he said. (It could be more than that.)

SolarEdge has learned first hand this year the stark difference between a big order and a big payday. “We definitely suffer from the lack of available credit for big projects,” Sella said. SolarEdge had lined up a deal with Spain's biggest solar panel manufacturer and developed a variant of its technology specifically for that company's factory — initially slated for a production capacity of 200 MW. When that factory was canceled in response to plummeting demand, Sella said, “We went from a high percentage of that factory down to zero.”

But Sella said financing is one thing SolarEdge is not worried about, at least for the time being. “Right now we have lots of money,” he said, emphasizing SolarEdge's low overhead. The company has raised at least \$34 million in venture capital, including \$23 million in second-round financing less than six months ago. Sella said that for the last three to four months, it has also been in negotiations with another investor who may add \$3 million to \$5 million to the Series B round. He said they would be a “very big strategic partner” if the deal comes through, and we'll know if it does within two months.

For the new project with BP Solar, the U.S. and Israeli governments have awarded a research grant through the Binational Industrial Research and Development, or BIRD foundation.

The main difference with National Semiconductor is that SolarEdge aims to integrate its technology directly into panels from the get-go through partnerships with manufacturers — rather than going for add-ons at the time of installation. (Tigo Energy, which just raised \$10 million, is also using an embedded system to boost panel efficiency.) But as much as SolarEdge has been trying to build a lead by staying in stealth, it will have its work cut out for it by going for big deals as a startup venturing out in the [midst of a shakeout](#).