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Will Agribusiness Be A Growth Market for Solar?

Two businesses that depend on the sun come together.

Produce and solar, it turns out, have a lot in common.

Agribusiness has a number of characteristics that could make it a prime sub-market in the solar business, according to Mike Miskovsky, General Manager of [Canadian Solar's](#) U.S. operations.

Typically, farmers grow their crops in relatively sunny areas with lots of open space and a lack of neighbors to complain about the size or site or a project. Many large Ag states like California have also passed renewable energy incentives. With organic remaining the fastest growing segment in food, many growers want to emphasize their sustainable credentials.



The Minturn Huller Cooperative, a shelling operation for almond growers, this week unveiled a 540-kilowatt system from Canadian Solar and project developer Cenergy. The system, overall, should reduce Minturn's annual electric bill by around 20 percent. A neighboring almond packing facility also has a 400-kilowatt system in place. (Canadian will also speak at our [2010 Solar Summit](#) taking place at the end of the month in Phoenix.)

Several [wineries](#) have also installed solar facilities.

Despite the geographic advantages for solar in agriculture, it is a customer base with a few tricky nuances. First, says Cenergy's Bill Pham, the consumption of power at many facilities remains lopsided. The Minturn Cooperative has intense energy demands from August through November. The nuts come in at the end of summer and the shelling machines have to crank 24 hours a day.

The rest of the year, however, it only needs a little bit of power for maintaining equipment and a few other operations. Thus, for eight months a year, the panels are largely producing power for the grid and banking up credits. (Some of the benefits and credits under the California Solar

Initiative also tap out if the installation exceeds 1 megawatt, so the system has to be sized accordingly.)

Land rights can also be an issue. Although a single farmer may own several adjacent tracts of land, easements for transmission have to be established to prevent any potential problems with future real estate transactions. Interconnections in many locations need to be upgraded.

Finally, farmers, at least in the San Joaquin Valley, tend to be somewhat conservative. They want to own the panels. Technically, the Minturn deal is a PPA arrangement: Cenergy owns the solar panel installation and sells power to the farmers. In reality, it operates more like a lease-to-own contract. After seven years, the farmers will get the option to buy the panels from Cenergy. (PPAs in typical cases might last twenty years.) The PPA structure of the deal is mostly a way to obtain financing.

"It is more of an ownership culture rather than a leasing culture," he said.