

## **Sunny outlook in solar investment**

A \$400 million loan guarantee for Colorado's Abound Solar will provide immediate jobs and the promise of a bright future.

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The Obama administration got it right when it recently backed a loan for Colorado's Abound Solar, a leader in advancing one of the most promising renewable energy sources.

While we've often criticized Obama's efforts to stimulate the economy with nearly \$1 trillion in spending, this \$400 million loan guarantee makes sense on several levels.

Most immediately, it allows Abound to hire 300 new workers in Longmont and 1,200 workers in Indiana to rev up production of its thin-film solar panels.

If things go well, those hires will be for the long term. And taxpayers won't be harmed, as the backing simply makes it easier for the start-up to gain funding that Abound, ideally, will repay once its new production lines go live.

Of course, there are risks that Abound won't succeed, and that the price of solar could continue to be too high for it to become a viable energy source for ratepayers. But the loan guarantee strikes us as a responsible way to give innovators in the private sector the chance to succeed with technology that could help reduce our dependence on fossil fuels.

Abound Solar, based in Longmont, is the brainchild of Colorado State University mechanical engineering professor Walajabad Sampath.

After years of research, Sampath has developed breakthrough technologies that allow his start-up company to further energize the industry, as The Denver Post's Mark Jaffe has reported.

Those technologies apply to the exciting field of frameless, thin-paneled solar panels that have some key advantages over traditional silicon solar panels.

Abound's promise could mean cheaper solar power — a real plus given that solar generation is presently the most expensive energy source available.

Without the loan, it would have taken much longer for Abound to capitalize on its new technologies.

Traditional, silicon-based solar panels take between 24 and 48 hours to produce, at a manufacturing cost of about \$1.60 a watt. Thin-film panels instead apply a film of cadmium telluride to cheap glass. They can be made in less than two hours.

The giant in the field, First Solar, can make the thin panels for 81 cents a watt. Sampath's technology can make the panels for less than \$1, but with increased production and the promise of new innovations, Abound hopes to become a market player.

Further, thin-film panels currently convert only about 10 percent of sunlight to electricity, compared to silicon's 20 percent.

Abound believes it can greatly boost its conversion rate and, in doing so, begin to erode the advantage of much cheaper coal.

At some point, solar must play in the market on its own steam. It can't rely on hefty government subsidies forever.

But at this point in its development, we are pleased to see this kind of smart investment in potentially transformational technology.