

**RENEWABLES: UC Berkeley's Kammen recommends upgraded feed-in tariff (Friday, July 9, 2010)**

Debra Kahn, E&E reporter

A new paper from a leading climate policy expert makes the case that California should have a feed-in tariff like the ones in Germany and Spain that have been credited with creating unprecedented demand for solar power.

Dan Kammen is a professor of energy, policy and nuclear engineering at the University of California, Berkeley, and was an adviser to President Obama on energy policy during the 2008 campaign. He is backing a state-set price for renewable energy fed back to the electricity grid. The price guarantee, known as a feed-in tariff, would promote the development of wholesale distributed generation -- mainly solar, but also some wind, biogas, biomass and geothermal power.

Wholesale distributed generation is key to meeting California's existing renewable portfolio standard of 33 percent by 2020, Kammen says. The state's three investor-owned utilities have missed the 2010 target of 20 percent renewables and are not on track to meet the 2020 target, either.

California already has a feed-in tariff of sorts: 2006's A.B. 1699 has provisions for projects between 1 and 1.5 megawatts. It also has the California Solar Initiative and the Small Generator Incentive Program, which provides incentives for projects under 1 MW.

Kammen and fellow UC Berkeley professor Max Wei are backing a model put forth in state legislation last year that would set a fixed price for utilities to pay owners of renewable, medium-size distributed generation systems 20 megawatts and below. The bill, A.B. 1106, is active in the state Senate but is not expected to pass this year.

The professors envision a rate starting at 16 cents per kilowatt-hour in 2011 and falling to 10 cents by 2020.

Apart from boosting solar power, a feed-in tariff could bring a host of other benefits, the authors assert. Since production and generation remain local,

distributed generation helps retain jobs and builds tax revenue, unlike large-scale generation that can be sited in neighboring states.

### **Pushing a German-style tariff**

Distributed generation could also create about 30,000 jobs per year, depending on where components are manufactured, since photovoltaics are more labor-intensive to build and operate than conventional natural gas-fired plants.

"The economic benefits are clear," Kammen said. "A FIT policy that is sized to the state's RPS goals would produce significant distributed renewable energy generation growth across California -- creating jobs, attracting investment and helping alleviate state budget issues. These key results should be carefully considered by policymakers across the political spectrum."

In Germany, Chancellor Angela Merkel cut the price paid for electricity from roof-mounted solar panels by 16 percent last week due to overwhelming success. Solar installations in 2009 reached 3,000 megawatts -- more than four times analysts' forecasts. Solar now powers 1.5 million homes in Germany, or 2 percent of total electricity demand ([Greenwire](#), March 31). Merkel also agreed to pay the industry \$134 million in exchange for reducing the feed-in tariff ([ClimateWire](#), April 26).

Ted Ko, associate executive director of the FIT Coalition, a nonprofit started about 1.5 years ago to advocate for the tariff, said Germany's model is considered the gold standard of feed-in tariffs. The FIT Coalition's proposal is largely modeled after Germany's, but it includes limits on the total number of megawatts in order to stay within California's RPS targets.

While the California Public Utilities Commission has proposed its own FIT that relies on auctions to set prices, Ko argues that the German model has already been road-tested.

"In order to actually get a feed-in tariff that has been proven to work around the world, we think the legislation is the best way to go," he said. "Utilities and the PUC seem to want this auction mechanism that hasn't been proven anywhere and has a lot of dangers for gaming the system, but people seem to want to give it a try."