Is Renewable Energy Ready for Prime Time?

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While the development of clean and renewable energy sources such as solar energy is of increasing interest to the public, that interest should be tempered with patience and pragmatism, says Eric Smith, associate director of the Tulane Energy Institute.

Energy expert Eric Smith advocates for careful integration of renewable energy resources. (Photo by Paula Burch-Celentano)

"I think solar has a place," says Smith. "But what's out there today is very expensive ? on the order of four times more expensive than conventional power, when the sun is shining. Of course, the sun doesn't shine all the time."

Smith says the nation should invest in solar energy research, but it is a mistake to push the technology onto the market before it is made affordable enough to make a significant contribution to the energy production in the U.S. He argues the same can be said for other renewable resources such as wind power.

"The best that can be expected with wind power is that it will be twice the cost per kilowatt-hour as natural gas and you have the same intermittent problem," says Smith, who points to an instance in Texas were an area around Houston narrowly averted blackouts due to a sudden drop in wind.

Smith also notes that antiquated energy grids could be potentially problematic for introducing various renewable resources.

"The other problem with intermittent sources is the power grids, even the smart ones, go unstable when you get more than 10 percent renewables involved," Smith says, adding that working on the efficiency and stability of the energy infrastructure is a wiser use of federal dollars.

"The idea is to modify the grid to make it smarter and more efficient. If you have the grid in place, then you can afford to do more with renewables."

Until then, Smith advocates cutting down consumption.

"The U.S. would be far better served by spending money on low-tech improvements in housing efficiency," says Smith. "Better insulation, tighter windows and doors, higher efficiency appliances ? really easy stuff that would have a tremendous effect on the demand, and would go straight through the economy."

The Tulane Energy Institute contributes research and analysis of the energy industry, including the integration of energy markets, policy, technology and the environment.