

Energy Storage Key to Clean Energy, Finding Cash Is Key to Energy Storage

TOM JOHNSON | SEPTEMBER 24, 2019 | **ENERGY & ENVIRONMENT, ROUNDTABLES**

Participants at NJ Spotlight roundtable on clean energy detail promise of energy storage and problem finding funds to invest in it



Mark Warner, a vice president of Gabel Associates

Energy storage, widely viewed as a cornerstone of the clean-energy economy, may be poised to take off, but it faces huge financial and regulatory challenges to fully realize its promise, according to a diverse panel of experts.

In a wide-ranging discussion at a NJ Spotlight roundtable on clean energy, a utility executive, energy-storage executives and a prominent lawmaker agreed finding the money to jump start a nascent but crucial sector is one of the biggest hurdles to expanding energy storage in New Jersey.

With the state heavily relying on intermittent, but cleaner, renewables sources of energy like solar and wind, it will never achieve its goal of a 100% clean-energy economy without cost-efficient energy storage, panelists agreed.

Mark Warner, a vice president of Gabel Associates, a Highlands Park-based energy consulting firm, called energy storage one of the desperately needed solutions in the clean-energy space, but at the same time, least commercially developed.

"It's the key to enabling us to move to more renewables," agreed Tom Leyden, senior director of distributed systems for EDF Renewables, an international firm that has committed \$10 billion to investments in energy storage. "We need that for our planet."

Business case for energy storage

But today, the business case for energy storage, except in some isolated instances, does not make sense, experts said.

“The most obvious, and most important, issue is you need a revenue stream to pay for that investment,” added Warner. “You can do it, but you have to find the special case.”

That portends trouble for the Murphy administration, which wants to develop 600 megawatts of energy-storage capacity in the state by 2021. “We are not going to hit that target by 2021,” Leyden said. “There is no way we can do it. That doesn’t mean we shouldn’t accelerate what we are doing in New Jersey.”

Others are more optimistic — to an extent. Victoria Carey, a senior consultant and project manager of DNV GL, noted energy storage is growing more and more affordable, but said investors still want to limit their risk investing in these projects. Carey characterized the sector as “booming, Wild West, gold-rush type of days.”

Three critical issues will drive the market, Carey said. They include regulating the market, allowing it to grow; establishing standardization of electric codes; and developing incentive programs.

If that happens, investors may open up to increased investments in energy storage. “There is a lot of third-party capital that is interested in investing in the sector,” said Alexandra Coleman, director of commercial risk for Centrica Business Solutions, “but we have to make it bankable and make it risk adjusted.”

Where will cash come from?

That raises the other difficult issue — where is the money going to come from, according to Assemblyman Andrew Zwicker, a Democrat from Middlesex County. “The biggest challenge is the money has to come from somewhere,” he said, noting it should not add to the burden on ratepayers.

In some cases, the costs can be lowered if new solar and energy-storage projects at facilities are pushed simultaneously, others said. “In New Jersey, there is no reason to put in solar without (energy) storage,” Leyden said. All of

his company's grid-scale projects for solar and wind will include storage in the future, he noted.

John Dempsey, manager of transmission development and strategy for Public Service Electric & Gas, said energy storage could be transformative for the state's largest utility. "If it is 20 percent of the cost it is now, we would use it everywhere around our system in a number of different ways," he said.

Others argued it is equally important in helping transform the grid into a more efficient and smarter system of delivering energy to consumers and businesses. The charging of plug-in electric vehicles offers tremendous opportunities, Warner said, at the same time being disruptive to the electric grid — unless it is made a lot smarter and more efficient.

"There is a huge opportunity to optimize the grid and lower costs," he said, acknowledging it will require regulatory changes and structural changes in the marketplace.

[SEE ALL COMMENTS](#) ✓