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## Understanding green energy's role in NJ

### NJBIZ panel examines how state can navigate policy chasm between Trump administration and incoming governor

BY JOHN PARKINSON

The green energy industry in New Jersey, especially solar, has been thriving, and brings a whole host of benefits to the table, including reducing the carbon footprint, creating energy efficiency and offering reliable sources of power generation and cost incentives to state businesses.

While the federal government has signaled its support of fossil fuels over renewables, the incoming Murphy administration has promised that within its first 100 days, the governor-elect "will start the process of creating a new State Energy Master Plan that will set New Jersey on a path to 100 percent clean energy by 2050," according to its campaign website.

At a recent energy panel hosted by NJBIZ on Dec. 12 at The Imperia in Somerset, panelists discussed a number of issues, including how to rectify the federal government's divergent wishes with the state; offered insights into the opportunities and challenges the green energy industry faces; and made recommendations for the Murphy administration's green energy master plan.

Panel participants included: Barbara Blumenthal, Ph.D., research coordinator, New Jersey Conservation Foundation; Lyle Rawlings, president and CEO, Advanced Solar Products; Adam Zellner, founder and president, Greener by Design; and David Weinstein, partner in the law firm Archer.

William Amann, president, M&E Engineers, was the event's modera-

tor. Amann is a LEED Fellow by the U.S. Green Building Council; a board member and advocacy committee chair for the U.S. Green Building Council New Jersey Chapter; and serves as chairman of the Somerset County Energy Council and Climate Reality Central New Jersey Chapter.

After a brief introduction from the panelists, Amann began the discussion with the panel in talking about the federal government moving away from encouraging and incentivizing the reduction of greenhouse emissions.

**Amann:** *With D.C. moving away from carbon policy, do you foresee the Murphy administration taking steps towards carbon reduction target mandates?*

**Weinstein:** With Washington moving away from it and Murphy's announcements during the campaign, it is going to be a goal of the administration to do that. I think there is going to be a lot of head wind from Washington. Murphy has announced about possibly suing the federal government. It is going to be very interesting to see where this goes with your federal policy diverging with your state policy and you have a lot of tension.

**Zellner:** It is going to be a lot of positioning against the [Trump] administration and what New Jersey thinks is right. Having worked for the state and being the policy director for the governor, I don't think people realize the size of this pyramid. People think

we are a \$34 billion state. The size and impact of the state is much larger than what people think.

**Rawlings:** This state is likely going to go in diametrically opposite direction [from the federal government] with a gov.-elect who is very strong on developing solar and other renewables. New Jersey, along with New York and Massachusetts, are really going to be the tip of the spear in this conflict that will contest the movement in the other direction of the federal government.

**Blumenthal:** Behind the scenes, there are those who are clearly in favor of green energy expansion and there are battles being waged. And those battles primarily have to do with policy mechanisms. Every state is doing experiments now to figure this out. In some ways, we are fortunate in that we can learn from other states.

**Amann:** *How do you think the new tax code would affect the development of energy projects here?*

**Weinstein:** If you look at the senate bill it leaves everything status quo; the house bill will be different. They are going to move alternatives into the input tax credit (ITC), which is currently at 30%. This is bad for solar because this will lead to additional competition. The overall reduction in tax credits is what is most interesting. The value of the credits will drop heavily. When you reduce the corporate tax rate, there is going to be less of a need for credits on the whole. This is not just within the energy sector, this is across the board.

**Zellner:** There are some clear in-

centives for the coal and gas world. One of the things you have to watch — and this is often a conversation I have with folks in the environmental world — that in terms of the gas world, we are following behind it. With a lot of those incentives, especially the gas folks here in New Jersey there will be a balance now between the extensions for federal approvals and NJ's ability to deal with those approvals. When there are energy vacuums where large nuclear plants are going away—at least in today's economic world—it looks to a gas replacement. And it might fly counter to some of the things the gov. elect is trying to do.

**Rawlings:** It is fair to note the House's version of the tax bill has a number of bad things for solar, but electric vehicles are being hit too.

**Amann:** *What about our electric and gas rates and whatever the governor does with carbon reduction strategies how does that affect the utility rates?*

**Blumenthal:** How many work in the energy sector in some form? For those of you who are here as representatives of other business industries, are you concerned about electric rates in New Jersey? I hear over and over again from the gov.-elect as well as members of the legislature that they do not hear your voice. They hear a lot from labor, but they do not hear from the business community.

**Rawlings:** We have a NJ administration coming in that is certainly in favor of sweeping changes. There is going to be a cost associated with many of these changes and we are



A PANEL DISCUSSION PRESENTED BY NJBIZ



From left to right: Adam Zellner, founder and president, Greener by Design; David Weinstein, partner, Archer law firm; Barbara Blumenthal, Ph.D., research coordinator, New Jersey Conservation Foundation; William Amann, president, M&E Engineers; and Lyle Rawlings, president and CEO, Advanced Solar Products. - NJBIZ FILE PHOTO

behind where much of the world is and where the rest of the progressive states are going. [However] New Jersey is the right state to tackle these. We have a lot of brain power and an incoming administration that will create some excitement.

**Weinstein:** I do agree it is going to be expensive. The reality that you are going to run into is that I don't know that the state can afford a large expense at this point without having a way to smooth out the expense. We are going to have a change in the tax code that is going to have large impact on the residents of the state. If you have a large influx of tax burdens on individuals coming from the federal level and put forth a very large energy sector bill to invest in the current market or change it to a new market, that impact is going to be very burdensome for people of the state.

The reality with the way Washington is right now, if you are looking at a short-term plan over the next four years, it is going to be incredibly hard life to go forward with it. If you are looking out to 2050, you do long-term planning. You set the goal posts back with the unknowns of the market place. You take today's economic factors and you extrapolate them forward. When you do that, it makes 2050 look rosy and may seem achievable. But by 2020 it is not going to be able to move and we are already behind. We have a governor that has an agenda, and in Washington they are saying this is something they don't believe in. No matter how strong we are as a state, the economics always take over. People care about the environment but there is a cost associated with it.

**Rawlings:** The conversation has been focused on costs, but we have to be focused on the benefits too. And those are real economic benefits. Solar energy drastically reduces the wholesale costs of energy during the middle of the day. We get up to 17%-18% during cool sunny days in the middle of the fall. And that has an effect on the high cost of electricity in the wholesale market of the day. Also, the climate change mitigation has an identifiable value. We have seen that already with the cost of Hurricane Sandy at \$55 billion. These benefits have to be weighed against the costs.

**Zellner:** We have several agencies in the state that give money away. We spend a lot of money subsidizing things, and we just have to do it with

some focus.

**Amann:** *What will the administration do in regards to resiliency?*

**Zellner:** With resiliency, we are spending billions of dollars today, and we still leave electrical wires exposed after natural disasters. What does resiliency mean? It is two things: a macro resiliency where we have power centers and micro where we have to distributed generation and micro power grids. We are going to see more micro grid conversations, and more master planning of critical assets for redundancy. Will it cost money? Yes, but that begins the conversation of the tradeoff rate based today of the distribution system and what the micro grids rate bases' might be tomorrow. Some might argue that if you don't start dealing with your above ground infrastructure, the cost is going to continue to creep up.

**Weinstein:** If we don't invest in the infrastructure it doesn't matter what you are delivering. If we don't invest there, you don't have your phone; you don't have your lights; and you can't produce anything. Once you make that investment, the next choices are ideology policy about where you want to go from a macro level. Do you want to decrease carbon production? Do you want to have a sustainable renewable energy?

**Blumenthal:** We do need infrastructure investment and the wonderful rate payer projects we could be working on to save on electricity rates long-term.

**Rawlings:** As an engineer, when new talks about resiliency come up, I'm thinking small. In my town, I want the sewage plant up and running in the next catastrophic storm so that the sewage doesn't get dumped into the river. I want my gas station to be up and running, I want the county emergency center to be up. This is where the new technology is really cool. We can take the Somerset County emergency center and put solar on the roof and in the yard. We can put in a big battery and a small generator, and they can all work together. We can make these nano grids. We can have these small grids distributed all over the place and keep our towns up and running. That is resiliency to me.

**Amann:** *The governor has his transition team in place so what do you think the first green energy issues he is going to need to address and what are the mid and long term issues?*

**Rawlings:** For solar energy, he is going to have an immediate chal-



Panelists offered insights on a variety of topics including infrastructure, resiliency and the state's impending energy master plan.

lenge. We have an incentive system in New Jersey that has been subject to boom and bust cycles, and we are on the precipice of a bust if corrective legislation is not done.

There is a state senate bill, 2276, that is addressing this by keeping the solar industry up and running to avoid the loss of the jobs and all those solar power systems from going under water. And it would also sunset our current incentive system in a couple of years as soon as we can get another, better system up and running. The idea is we need to cut out the boom and bust cycles and have a steady growth of solar energy congruent with the next administration's plans and goals and do so at a much lower cost to rate payers. This is a transition bill until we can craft something better, and that is something that is vital to do very early in the next administration.

**Blumenthal:** They need to create a policy mechanism for offshore wind. If we look at Europe, prices there have plummeted because they have changed the policy mechanism which allows prices to be more transparent. We have to look carefully at how we are going to look at offshore wind.

**Zellner:** In his first 100 days he needs to have an energy master plan. It is a signal from the governor that tells the cabinet, the independent authority and the funders the priorities.

**Rawlings:** Long term, if we are really talking about what the governor is saying in terms of moving to 100% renewables by 2050, the physical infrastructure of the grid is going to have to change. Storage is going to be required. Long-distance transmission of renewables is going to go over long-term geographic areas. We will transmit across time zones. When it

is 9:00 in the morning in Denver and there is not a lot of sunlight, it is 11am here and we will be pumping out a lot of sun. In the later part of the morning we will pump solar to the west and then in the afternoon, when our sun is starting to go down, and it is sunny in Denver, those electrons are going to come back east again.

We need a mix of power too; wind is a great partner with solar. We are going to have to tweak the energy business and how that is structured so it can handle renewable energy and still stay healthy.

**Amann:** *What is the role of the New Jersey business community to get green policies?*

**Zellner:** The business community has got to speak up as part of that process, because if not there is an assumption that they are fine with everything going on. In the governor's office, they check the public call-in logs. There are also a number of public hearings people can attend.

**Rawlings:** The ideal answer to your question is that there would be some type of organization that would lobby in Trenton to speak to the businesses that believe in going green and clean. The Green Buildings Council is one of them. A broad business association focused on clean and green doesn't exist and not sure we can put one together from scratch.

**Weinstein:** If you want to be green you have to speak up; that is how Trenton runs.

We need to hear people at the state level because the energy master plan is going to direct where we go. If you want it to be all green or you want it to be a mixture, the more you speak up the more the governor will modify his policy.

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