

InfrastructureUSA

Guest on THE INFRA BLOG

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Conversation with Steve Anderson, Managing Director, InfrastructureUSA

Energy Is a Key Part of Our Infrastructure Challenges

I had the good fortune of serving as the mayor of Fort Wayne, Indiana for eight years, which is a mid-sized city, but it's a city where major policy considerations at the federal level had a great impact on the infrastructure of our city. I'm pleased to say that over the period of time that I served we were able to come to an agreement on a consent decree around storm water and sanitary sewer overflow problems, as over 800 cities in the country have had to deal with. Energy is a key part of the infrastructure changes and the challenges, whether you're talking about water, sewer, or you're talking about redoing your electric street lighting to a new LED system. So the smart city initiatives, the smart energy, the smart grid, that's all where this dynamic change in technology, policy, and markets are coming together. So when you think about infrastructure improvements, why not be thinking about infrastructure improvements that include what we would call the "advanced energy infrastructure." So there's \$100 billion a year that's being approved by the public utility commissions in this country for the needs to invest in the electric system, that infrastructure. And some of those should be going hand in hand, meaning the energy efficiency, demand response, saving money, reducing stresses on the grid, and new technologies like wind and solar power. All that we see as part of the way we transform the U.S. electric power sector, and that also is capable of assisting in the innovation that we want to see in new technologies that support smart transportation infrastructure. For example, some cities are considering putting in as part of an infrastructure change the charging systems for electric vehicles. They are also looking at transportation related infrastructure, so take for example the LED lighting systems that have the ability to put 4G LTE into that new street lamp, and at the same time help with public safety but also with data around the performance of the infrastructure. We see infrastructure as not just the bricks and mortar, but all of the connections that are going to be part of a successful new advanced energy infrastructure, and an advanced technology infrastructure.

Engaging Consumers to Fight For a Better Electrical Grid

Experiencing this as a consumer, as a business owner and as a public official, you have electrical power outages to the extent that we've had because 70% of our grid transmission lines are 25 years old, or some power transformers are averaging 40 years in age, and the average power plant is over 30 years of age. So our infrastructure that keeps the lights on costs us, when it goes out and surges and spikes, \$150 billion per year. So if we are not working hard to think about the modernizing of the electric power system, then we are also falling short on the engagement that matters a lot. When the lights go out in your city—we've seen that with Superstorm Sandy on the Northeast—it was a huge cost to people, to their own personal security, lives. And so we believe that

we have to find ways to engage consumers, and we have companies that are helping to do that. We have companies that are helping to reach out to individual consumers of electric power, the use of water in a city, and giving them more data that is clearly easy to understand, comparing your own power usage to a neighbor's, understanding how the power is generated. Customers are asking, "Is this clean energy? Is this coming from a particular source of light coal that is not perceived to be clean power?" So the way we see engaging utility executives, state regulators, and member companies is that in the end we're getting more information to the consumer about this need for improving the grid for security. Increasingly, I think certainly those that are involved in a day-to-day operation of any business are seeing that. In New York, for example, Governor Cuomo has put forward the Reforming the Energy Vision initiative, true to New York public service commission. And that commission order, called the REV proceeding, is a method to think about the way in which electric utilities are compensated so that there's an incentive to make the investments to support clean, secure, affordable energy, to transform the aging infrastructure of electric utilities to be able to serve the demands of the cities of the future.

The System Can't Change Without the Public on Board

I think as you begin to have more stress on the grid because of its aging infrastructure and the need to invest and upgrade, one of the ways that is the most effective from my personal experience is to have discussions with consumers. We're seeing consumer power has been growing, meaning the clout that consumers have in many different dimensions of our economy. And I see that happening now in energy. In that same opportunity where consumers want to know where that power's coming from, they want to know what the cost is—but they're also willing, when you have an opportunity to explain what the technology could do, to improve that aging infrastructure. Whether it's water or energy, you find that you're seeing, city by city, communities are doing extensive outreach to reach their consumers and share data and information and talk about why increasing rates is important for their security, for being sure that they have the services that they want in the future, and how that money will be spent over a period of time. Navigant Research estimates that this is a massive investment need, that investment in smart city technology infrastructure will total over \$108 billion in this decade. You don't get that concurrence to raise the local water rates, the sewer rates unless—and that would be the case with municipal bonds for traditional infrastructure—unless you find ways of communicating to the customer and getting the citizen, getting the individual right there to understand why that's important. In our sanitary storm water issue and infrastructure investment that was critical to separate the storm water that was going into the rivers, we had over forty community meetings, and the city council vote was eight to zero to increase our rates early in 2000 and there's been an increase on a gradual basis since then. So I think it's clearly a need to do this state by state, city by city. Fortunately we've got some new technologies and methods to help us do that. You can reach out through the Internet in all kinds of creative social media ways that we're beginning now to see work. And we believe that's what's going to be happening in the energy sector as well. When electric utility rates are asked to go up, then you have public utility commissions that have to hold hearings on those, and you have lots of citizen engagement. There are also solutions that help keep rates flat, or lower, over

time as innovative new technologies can also be brought to bear. So it's a question of continuing the outreach and finding innovative new ways to talk to citizens and ratepayers.

Advanced Energy Economy: Mission & Goals

We are a national association of businesses. Those businesses are working to make the energy we use secure, clean, and affordable. And we work on policy issues at the state and national level. We work to help accelerate the growth of our advanced energy companies, so our business association is active now in 26 states and we have partner organizations in many of those states and in other states like California we have a direct engagement, and we think this is really important because the advanced energy industry is a \$200 billion market in the United States. That means it's bigger than the airline industry, and it's as big as pharmaceuticals, and it's growing rapidly. It's a global market opportunity for many of our companies. So we're about building the market growth for clean energy policy across the federal space, the state space, and now we're doing some work in cities.

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