

Mayor Gary R. McCarthy
City of Schenectady, New York

Testimony - February 27, 2018
10:00a.m. - 2123 Rayburn House Office Building
State of the Nation's Energy Infrastructure
Subcommittee on Energy
U.S. House of Representatives
Committee on Energy and Commerce

Chairman Upton, Ranking Member Rush, distinguished Members of the Committee and NY-20th District Congressman Tonko. I thank you for the opportunity to appear before you today.

While I'm the Mayor of the City of Schenectady and serve in the leadership of the New York Conference of Mayors, I want to make available to you the resources and staff of the US Conference of Mayors under the capable leadership of the Conference President, New Orleans Mayor Mitch Landrieu and Executive Director Tom Cochran. The Conference team is ready and able to assist you in research, identifying problems and opportunities, in adoption of a national energy infrastructure policy and the appropriate budgetary support to ensure the successful implementation of that policy.

We live in an exciting time, one of rapid change, the time of disruptive technologies, a time of great opportunity.

The City of Schenectady has a long and proud history of innovative and creative technology. Thomas Edison founded the General Electric Company in our city over 125 years ago. X-ray technology was developed in Schenectady, the 1st television broadcast occurred in our community, large steam turbine , many world changing products and technologies have their roots in Schenectady.

Today some of the most valuable real estate in Schenectady and communities across the country are our light poles. The conversion of conventional street lights to LED fixtures is happening everywhere. It makes sense, there is an immediate savings of over 50% in electrical costs. But what we are doing in Schenectady and in some communities across the country is looking at the opportunity to add additional features, sensor based technologies, to the light pole when the conversion to LED fixtures is happening.

Environmental Sensors - temperature - precipitation, device based utility grade meters - this will allow different owners to place devices on a light pole and pay for the electricity used by just their device, Optical Sensors - deterrence & documentation for policing - traffic & pedestrian analytics - dimming controls for additional electricity savings, Acoustic Sensors, Wi-Fi and cellular communication protocols are just a few of the possible additions to a standard light pole. These devices will enable better and more cost effective delivery of municipal services, valuable exchange of data & information, improved educational opportunities within our city school district and help with cost containment in providing health care.

Schenectady is partnering with National Grid, our local utility, in implementing a REV demonstration project in our city. REV is Reforming the Energy Vision a program of New York Governor Cuomo's comprehensive energy strategy to build a clean, more resilient and affordable energy system.

We are working with National Grid, GE, AT&T, Cisco, Presidio, Cimcon Lighting and other local partners to do a city wide deployment of 'Smart City' technology as we do the conversion to LED lights.

We hope the National Grid project in Schenectady will create a replicable model for utilities and other communities across New York State and hopefully the country.

The ongoing efforts of Schenectady to further invest in infrastructure by leveraging convergent technologies: including distributed generation resources, intelligent services, buildings and the electrification of transport. Will not only make the City more energy productive, economically & environmentally sustainable, but will assist in New York State its individually adopted economy-wide target of 80% greenhouse gas emission reduction by 2050, 80 x 50 (from a 1990 baseline).

The 80 x 50 challenge is a significant goal and will require fundamental changes, which means that the early cost savings and sustainable applications of Schenectady & National Grid's initiatives could serve as a model for other communities and utilities.

This type of project has the potential to transform communities and has clear implications for the global competitiveness of this country. But it is based on a stable and adaptable electric grid.

There are many components of 'Smart City' or Smart Grid projects that are self financing.... the conversion to LED light fixtures is a clear example. Some lend themselves to partnerships between utilities, communities and companies public WiFi in commercial areas. Others like upgrading utility resiliency to deal with physical and cyber attacks, electromagnetic pulses, economic warfare or proof of concept for emerging or yet to be developed concepts or technologies will likely require 100% funding from the federal government.

Mr. Chairman I again thank you for the opportunity to be here and look forward to the committees questions.

US Conference of Mayors:

'The New Bedford Principals'

Adopted last year at the conclusion of the Mayors' Summit

Washington, DC—Today as part of a two-day national mayors' summit on smart cities and new energy technologies, sponsored by The United States Conference of Mayors (USCM) and hosted by USCM's Energy Chair New Bedford Mayor Jon Mitchell, mayors developed "The New Bedford Principles," a six-point energy recommendation to be included in the USCM National Infrastructure plan that will be presented to the nation by USCM President New Orleans Mayor Mitch Landrieu later this year.

The six principles include recommendations for tax reform and tax laws as well as infrastructure legislation.

The principles are:

1. Seek an energy-friendly tax reform package that doesn't undermine current progress:
 - Keep tax-exemption on municipal bonds
 - Keep state and local tax deductibility
 - Preserve and extend tax credits and other incentives to support renewable energy
2. Authorize additional tax and other incentives to promote more investment in microgrids, distributed generation, and storage systems.
3. Direct funding to support the development of local energy assurance plans to advance local resiliency efforts, especially those to combat climatic events.
4. Direct funding to municipal utilities or tax incentives to investor-owned utilities to modernize local grids, including microgrids, to increase resilience to climatic events.
5. Direct funding to support local energy block grants to support city energy independence goals
6. Restore federal challenge grants to incentivize smart grid efforts.