

Infrastructure Needs for Reliability & Affordability

Bill McCourt, Executive Director, RI Manufacturers Association

INTRO:

Energy and natural resources are the life blood of manufacturing. Manufacturers need adequate, secure and affordable energy and raw materials to compete in the global marketplace. Manufacturers use one-third of our nation's energy and are directly affected by the cost of energy not only in making the products we sell, but also in the cost of maintaining our administrative and warehousing operations.

Manufacturers have achieved great energy efficiency through cost-effective distributed generation, combined heat and power technologies, waste heat recovery systems, water reuse and recycling, intelligent energy systems and improved process manufacturing. Through innovation, research and development, local manufacturers have also play a significant role in improving the efficiency of commercial and residential buildings.

Slide 1 – Industrial Energy Sector's Use

While the industrial sector is the largest consumer of energy, its energy usage has plateaued at 1975 levels, while all other sectors' consumption has greatly increased. Thanks in large part to more efficient technologies and energy reduction strategies, the industrial sector's overall energy use remains near 1975 levels. This is in sharp contrast to transportation, residential and commercial energy consumption, which in the same period rose significantly.

Slide 2 – Renewable Energy Usage

Manufacturing is a strong leader in the use of renewable energy. In 2012, the industrial sector used almost 20% more (2,269 trillion BTUs of renewable energy, compared with 1,943 trillion BTUs) than the transportation, residential, and commercial sectors combined. Renewable energies provide an efficient and environmentally friendly means to power various manufacturing activities. As more manufacturers incorporate sustainability efforts into their long-term business structures, and as more forms of renewable energy become available to a wider audience, this trend will likely continue to grow.

Solar program costs resulting from ambitious expansion goals will most likely drive up the cost of power year over year.

Slide 3 – Industrial Fuel Usage

U.S. manufacturing has also accomplished total declines in the use of every industrial fuel source; by 2012, consumption levels of petroleum, electricity, natural gas, and coal were all significantly below those from 1997. The use of coal in particular saw a sharp decrease. Although there was a post-recession increase, you can see that the recent trend is still downward despite reshoring.

[The reduction in industrial fuel use below 1997 levels is significant. It demonstrates manufacturers' commitment to reducing energy consumption, as well as forging a path for alternate energy sources. The sector leads on the use of renewable energies. Increasing use of renewables and a decrease in fossil fuel consumption are good indicators of manufacturers' commitment to sustainability.]

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Slide 4 – Correlation / Dependence on Gas

At almost 50%, gas fired generation is a significant portion of the generation mix for New England. The lack of fuel diversity creates increased price volatility risk. This, coupled with the lack of adequate gas infrastructure in New England creates higher winter price volatility.

Slide 5 – Industrial Gas Consumption

Daily gas consumption by industrial users has been increasing in recent years (up more than 20% since 2009). As continued progress is made on utilizing natural gas as a transport fuel, additional gas demands could be significant in the future.

Slide 6 – Driving Forces in New England

The first wave of coal retirements were older smaller units that ran only seasonally; the next wave will be more base load units, that will require more gas substitution. As coal plants retire and are replaced by gas fired generation, power prices will become increasingly correlated to gas prices and volatility. New England also faces uncertainty surrounding Vermont Yankee (retirement date is still the subject of speculation). Residential and commercial demand also continues to grow.

CLOSING:

Manufacturers use a significant amount of the energy in this country and have long recognized the importance of energy efficiency to their operations. Affordable and reliable energy is essential to the long-term health of the U.S. economy and the prosperity of American workers.

We support an energy strategy that embraces all forms of domestic energy production while expanding existing conservation and efficiency efforts. However, at this time, oil, natural gas and clean coal remain essential contributors to America's energy security and other sources limit our ability to compete in a global marketplace.

We recognize the need and support the significant investments that are required to modernize the utility grid and utilize smart metering, distributed storage and other advanced technologies to improve efficiency, affordability, reliability and security. We also support appropriate government policies, including the development of national and regional energy policies that would provide a climate conducive to exploration, development and efficient utilization of all domestic energy resources.