



SHAPING THE FUTURE OF ENERGY

Innovative Collaboration: Integrating Distributed Energy into a New Utility Model
IPPNY Spring Conference – May 21, 2014

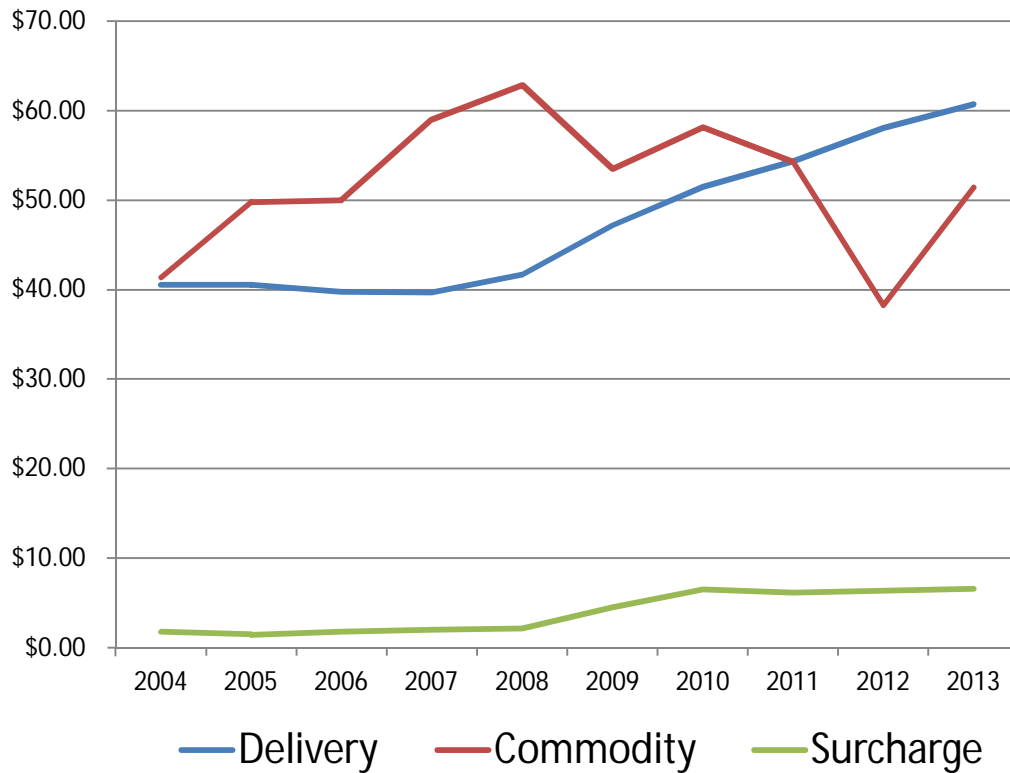


OUTLINE

1. **Why** we need to rethink our energy system
2. **What** we're driving towards
3. **How** we get there

BURDEN ON RATEPAYERS

Electric Bill for Average Middletown Household* (600 kWh) : 2004-2013



*Representative Upstate City



BURDEN ON RATEPAYERS

Over the last ten years, \$17 billion was invested in New York State's electricity infrastructure.



Over the next ten years, **an additional \$30 billion in capital investments** is needed just to maintain our infrastructure.

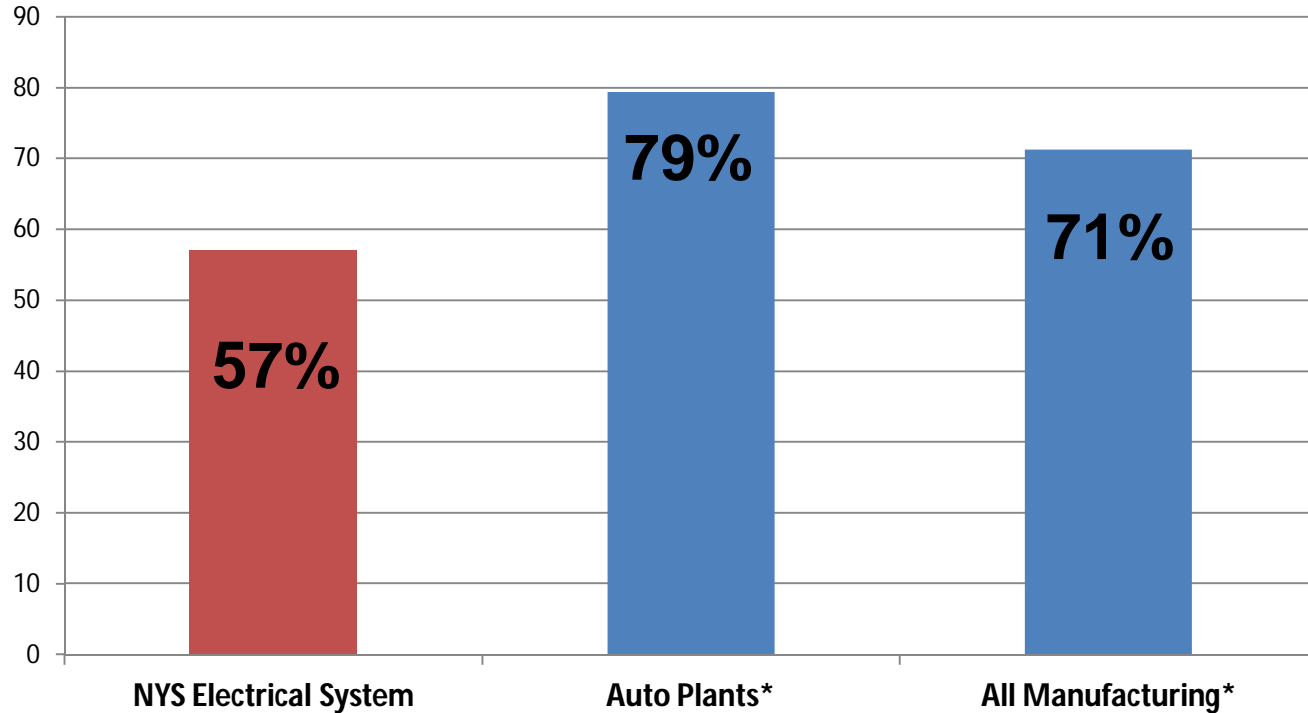
BURDEN ON RATEPAYERS

rate of capacity utilization:
under 60%



BURDEN ON RATEPAYERS

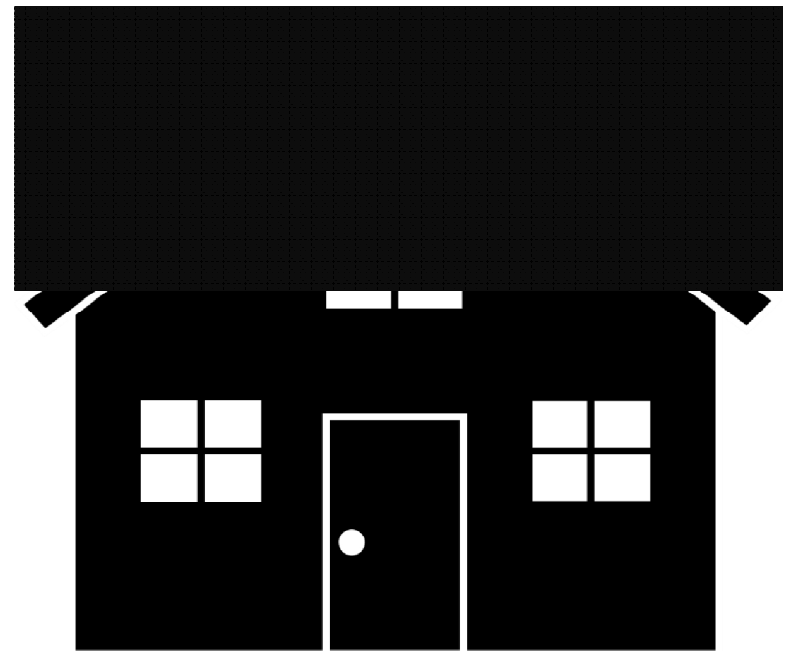
Capacity Utilization Rates Across Sectors



*2013 Capacity Utilization Data from U.S. Federal Reserve

BURDEN ON RATEPAYERS

35% of energy
used in residential
and commercial
sectors **is wasted**

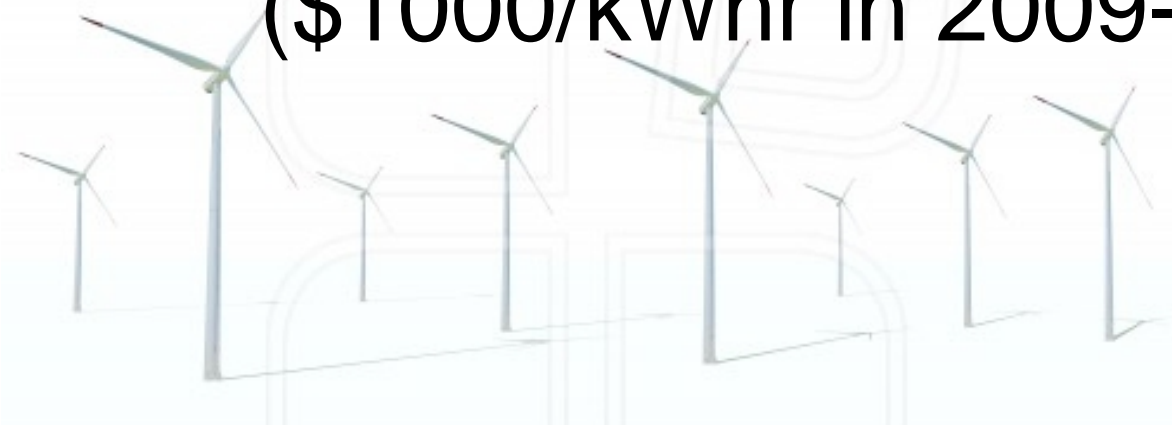


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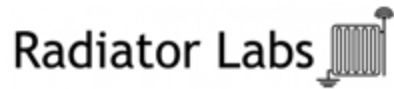
***Our current path
is not sustainable.***

SHIFTING COMPETITIVE LANDSCAPES

- Oklahoma is generating wind power at \$.02/kWh
- Austin Energy signs solar PPA at \$.05/kWh
- Battery costs declining 20-30 percent/year: less than \$200/kWh by 2020?
(\$1000/kWhr in 2009-2010)



INNOVATION SITTING ON THE SIDELINES



Higher performance lighting solutions

These are the types of homegrown companies we need to continue to innovate and create jobs here in New York State.

A SENSE OF URGENCY IS NEEDED

Extreme weather threatens our well-being and way of life...



REFORMING OUR APPROACH

The State Energy Plan seeks to...

- Give customers more choice, control, and value in their energy usage for each dollar spent
- Incentivize utilities to focus on system and capital efficiency
- Align energy policies and the use of ratepayer funds to animate private markets and scale deployment
- Provide a bridge to a self-sustaining, private sector-driven clean energy markets

PUTTING POLICY TO WORK

Over the past year...

- LIPA: PSEG and Utility 2.0



- NY Green Bank

To accelerate clean energy deployment in NYS by working in partnership with the private sector to establish dynamic, self-sustaining financing markets

- Clean Energy Fund

To enhance the State's energy efficiency and renewable programs and improve leverage, while also managing their transition to market-based clean energy activities

- NY-Sun



\$1 billion commitment to significantly expand deployment of clean energy and transform New York's solar industry to a subsidy-free sector

- Community Grid Prize

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REFORMING THE ENERGY VISION

REV includes the goals and vision of this administration...

A public regulatory proceeding to

- ❑ improve system efficiency
- ❑ create price signals that will help markets work better
- ❑ develop competitive markets around customers to provide more choice and value

"In one of the most promising moves in the energy sector in years, New York State is proposing a way to get a head start on, and perhaps help lead, a revolution in the world of electricity generation."

New York Times, "Smarter Electricity in New York" May 13, 2014

"New York Prodding Utilities to Shift From Monopoly Model... The move would spur generation from thousands of smaller systems owned by individuals and other companies -- notably rooftop solar panels."

Bloomberg, May 12, 2014