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Utility Overview Presented to  
House Committee on Natural Resources & Energy

January 21, 2016

# BED Overview

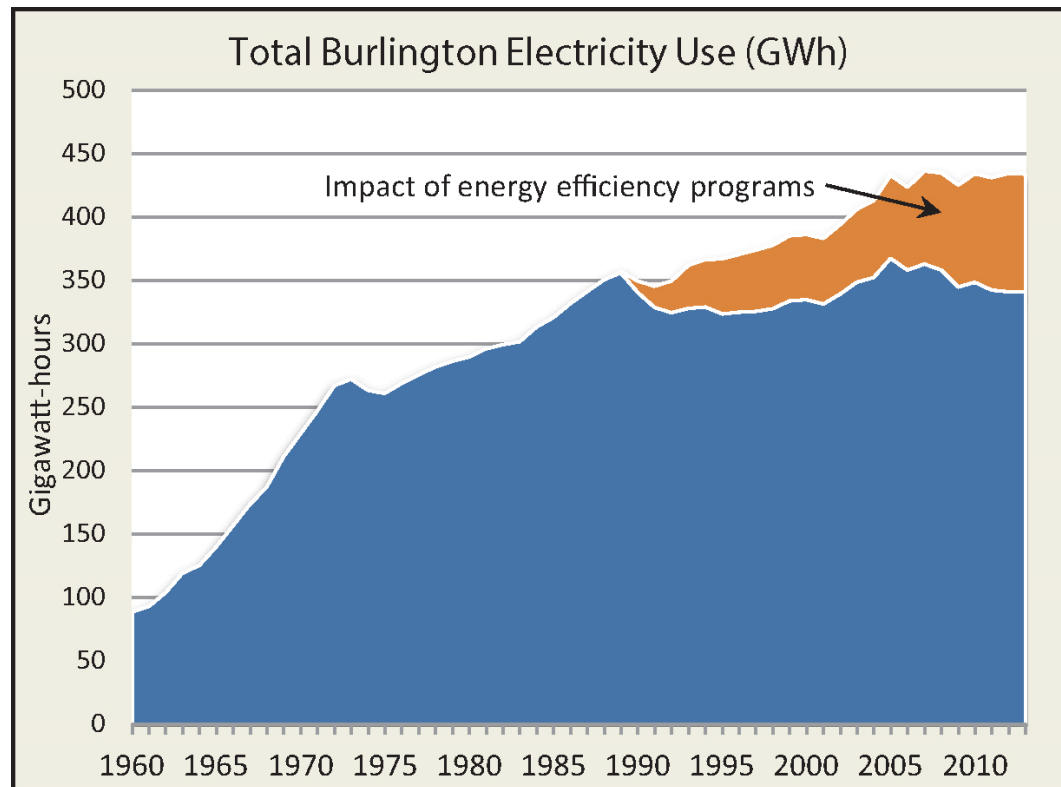
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- Municipal utility located in Burlington
  - Public Power since 1905
- 20,000+ customers
  - 16,600 residential
  - 3,755 commercial and industrial
- Electricity facts:
  - Summer Peak: ~68 MW
  - Energy Use: ~350,000 MWH



# BED is its own Energy Efficiency Utility

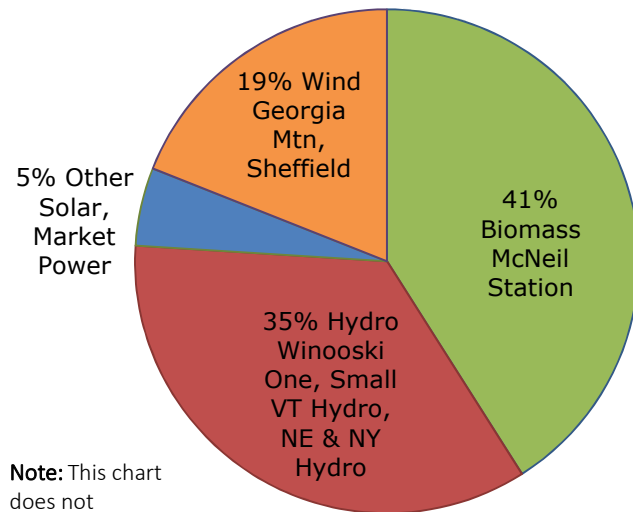
- *Burlington uses less energy today than it did in 1989*



# National Leader in Renewable Energy

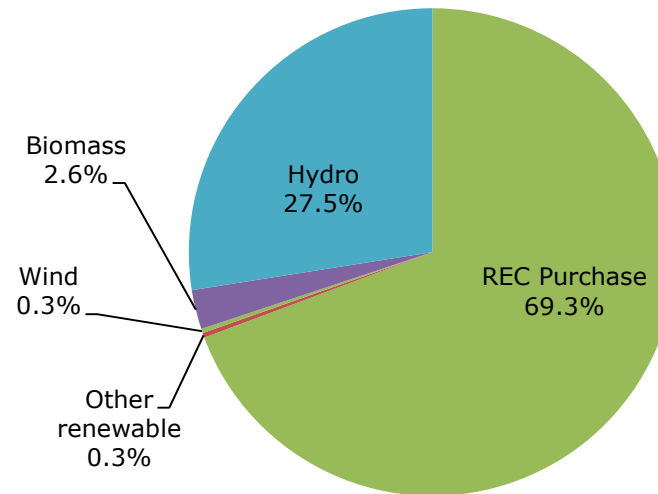
- *First city in the nation to source 100% of energy from renewable generation*

**BED Owned & Purchased Power Resources CY2014**



**Note:** This chart does not represent BED renewability

**BED Renewability, including REC Sales & Purchases CY2014**



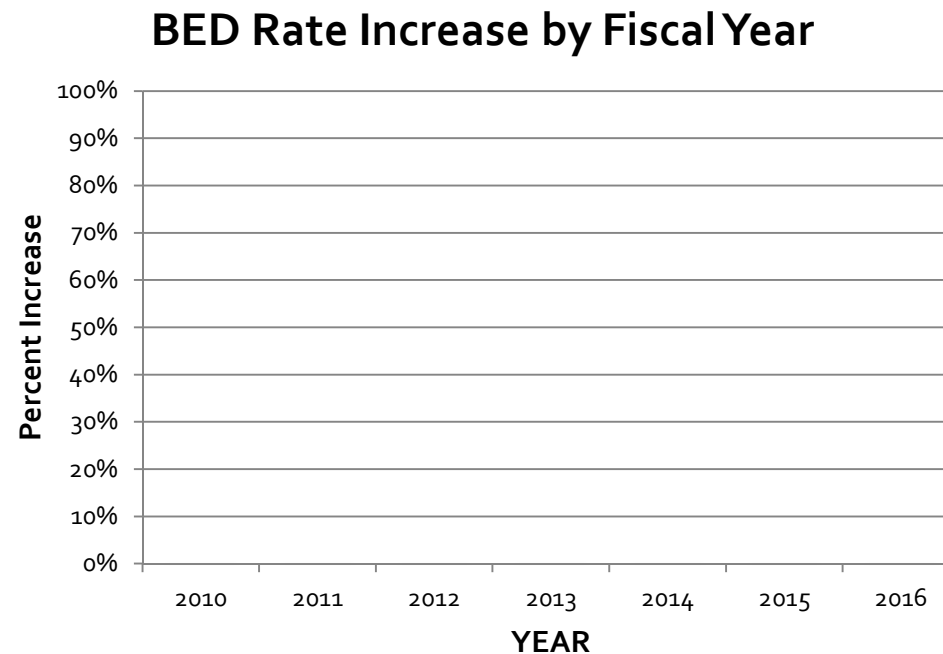
**Note:** This chart excludes 54,437 mWh of UVM's energy load served by BED, and excludes the renewability from a matching number of small hydro RECs that UVM purchased to cover that load.



# No rate increase since 2009

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- *Nor do we expect an increase soon*
- Keeping rates low and stable for customers while continuing to lead in renewable power



# Why transform?

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*The energy industry is undergoing a sea change. Think:*



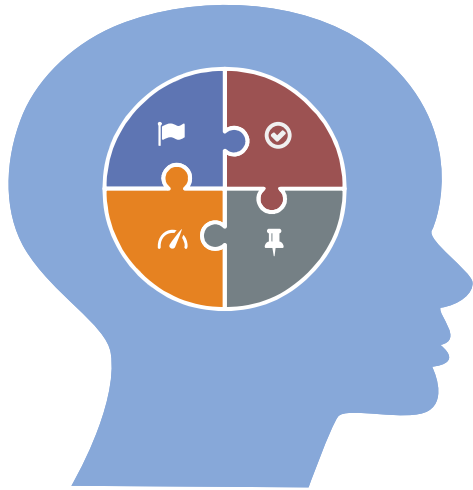
Traditional Utility  
Hub and Spoke Model  
"One-Way Power System"



Utility 2.0  
Peer-to-Peer Network Model  
"Energy Cloud"

# Era of Utility Disruption

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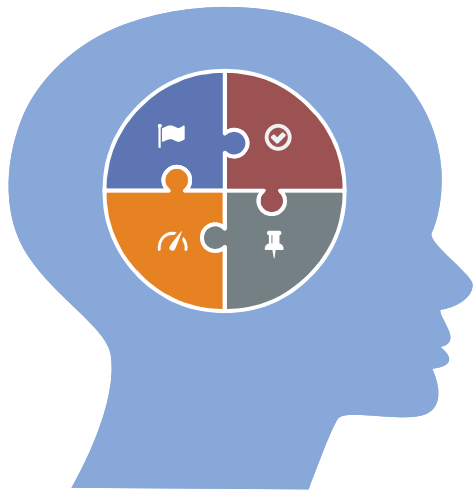
## Three driving factors:

1. Customer choice is the strongest force
2. Distributed generation and energy efficiency have changed demand forever
3. Energy technology is advancing at an ever-quickenning pace

*These are all good things!*

# Key Observations

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1. Data has become as important as electrons
2. Extraordinary opportunity to strengthen grid both in resiliency & security
3. Energy regulation must keep pace with dynamic industry



# Transforming in Step with Customers

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## Inside out

- Strategic transformation
  - Structural reorganization
  - Extensive process improvement
  - Efficient operations translates to savings
- Focus on customer engagement
  - Trusted partner to customers
  - Concierge service model
- Growing human capital
  - Modernize utility roles and functions
  - Expanding our skill set

# Transforming in Step with Customers

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## Outside in

- Efficiency First
  - Increase traditional EEU work
  - Electric/thermal efficiency
    - *Energy Champ Challenge*
    - Successful partnership with Vermont Gas
  - Passive House
  - Building labeling
  
- Improve Electric Vehicle Infrastructure
  - 4 stations in Burlington
  - Another 8 to be built in 2016



# Transforming in Step with Customers



## Outside in

- Increased Solar
  - Two utility scale projects in 2015
  - Push to expedite solar deployment in 2016
- Storage Pilots
  - Economics still difficult for residential scale storage
  - Near-term opportunity with utility scale storage
- Microgrids Development
  - Site-specific installations
  - Neighborhood scale



# Thank you

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- Questions?
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