

# OPTIMIZING OUR ENERGY SYSTEM

Creating more flexibility for utilities while raising the efficiency goals

## BACKGROUND

Energy efficiency is the cheapest, cleanest energy resource we have in Minnesota: it costs significantly less to save a unit of energy than to buy one. Through efforts that reduce the amount of energy our homes and businesses consume, our state's energy efficiency programs have saved enough energy to avoid building 9 power plants over the last 20 years. This saves residents and businesses money because building fewer power plants means paying for fewer power plants on your electric bill. But there's still more we can do to reduce waste and use energy more efficiently in our energy system.



## THE PROBLEM

Utilities in Minnesota regularly invest in their infrastructure to upgrade and improve their equipment and systems. But some investments like combined heat and power, better voltage control, and even grid connected storage do not automatically occur because electric utilities lack a business reason to do so. Because of this, utilities are not making additional investments to optimize their system, even though these investments could drive deeper savings for consumers and utilities.

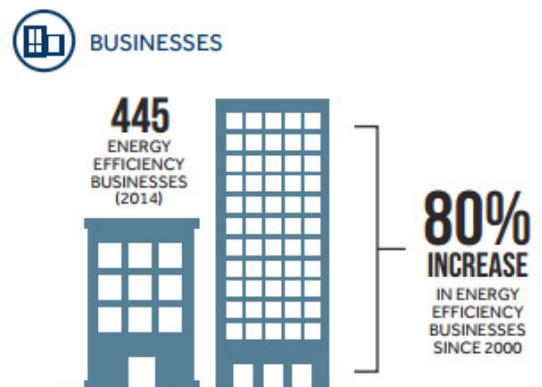
## THE SOLUTION

Fully optimizing our energy grid requires giving the utilities additional investment tools and expanding the Energy Efficiency Resource Standard to incentivize the use of new technologies like combined heat and power, better voltage control, and energy storage. Implementing these kinds of technologies will help Minnesota capture additional efficiencies to optimize our energy system, saving customers and utilities money.

## THE BENEFITS

Optimizing our energy system can be done through policies that bring greater resiliency and reliability to the grid, and create jobs throughout the state. The benefits of energy efficiency include:

- **Jobs:** Energy efficiency programs have created 63 percent of the clean energy jobs in Minnesota, totaling nearly 10,000 as of the end of 2014.
- **Saving Money:** Energy savings programs have created a **total savings of over \$6.8 billion** for Minnesota consumers and utilities over the past 20 plus years.
- **A Resilient Grid:** Optimizing our energy system not only saves money, it enhances the resilience of the grid.



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