

# Doing More and Using Less: Helping Electricity and Natural Gas Utilities Help Save Consumers \$700 billion

## ENERGY EFFICIENCY MEANS LOWER BILLS, MORE JOBS AND LESS POLLUTION

Using energy more efficiently in our buildings, appliances and equipment could cut U.S. power consumption by 23 percent, save consumers nearly \$700 billion and create at least 900,000 jobs by 2020, according to a study by the global consulting firm McKinsey & Company. And the U.S. EPA says energy efficiency improvements in today's typical household can save more than \$700 annually, or one-third of the \$2,200 average utility bill. At less than 4 cents per kilowatt hour, it's also the cheapest resource for utilities to meet customers' needs and improve energy reliability and security.

Electricity and natural gas utilities account for more than half of the nation's carbon dioxide emissions contributing to global warming, and electricity generation is also responsible for a large portion of the nation's air and toxic pollution. Efficiency provides the single largest, and most cost-effective, opportunity to cut global warming pollution while cleaning the air, creating jobs and saving businesses and consumers money. And electricity and natural gas utilities can be critical partners in this opportunity to do more by using less. However, regulatory barriers discourage utilities from investing in energy efficiency even though it costs at least 50 percent less and carries less risk than building power plants, transmission wires or pipelines.



## BREAKING THROUGH THE BARRIERS TO SAVINGS

Unfortunately, consumers face many obstacles to improving efficiency, including inadequate information and often insufficient time—as everyone who has rushed to replace a broken appliance knows. Residential, business and industrial customers also may lack capital to replace major equipment that will improve efficiency, or decisions may be made by those who aren't paying the utility bills (such as landlords). These barriers must be addressed by strong policies and effective, sustained programs to help customers capture the benefits from energy efficiency. Chief among them are efficiency programs, minimum efficiency standards, and research and development. Electricity and natural gas utilities can be key partners by providing information, assistance and incentives. However, most utilities face their own obstacles due to unintended, but powerful, regulatory disincentives toward investing in efficiency.

Fortunately, there are ways to help both investor- and publicly-owned utilities overcome them and provide consumers with affordable, reliable and environmentally



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sensitive energy services. NRDC recommends legislators, regulators and governing boards adopt these proven policies to correct these regulatory barriers:

### 1. Make energy efficiency the highest priority resource

- Require utilities to demonstrate they plan to invest in all cost-effective energy efficiency—a reliable, low risk and low cost way to meet consumer needs—before pursuing more expensive and dirtier resources.
- Set aggressive energy-saving and demand-reduction goals based on rigorous analyses of the achievable potential in each utility’s service territory. Today’s aggressive efficiency programs typically realize net annual first-year savings of a minimum 1 to 2 percent of annual electricity sales and 1 to 1.5 percent of natural gas sales.

### 2. Align utility incentives with customer interests in affordable energy services

- Allow utilities to recover prudently incurred costs of energy efficiency programs on a timely basis. Because energy efficiency programs are an essential part of how utilities can cost-effectively meet customers’ energy needs, regulators should authorize utilities to recover program expenditures through their rates.
- Break the link between recovery of authorized fixed costs and utility sales through “decoupling.” For most investor-and publicly-owned utilities, the revenue they need to recover fixed costs—such as repaying debt or for generation, transmission and distribution equipment already installed—is linked to energy sales. If the income they expected when asking regulators to approve their rates falls because consumers use less energy, it can threaten the utilities’ financial health; or provide a windfall if they use more. Regulators should use regular, small rate adjustments (typically less than 3 percent up or down) to correct for differences between actual sales and the projected sales used to set rates. This will either restore to the utility or return to customers the money under- or over-collected from sales fluctuations. (See NRDC fact sheet *Removing Disincentives to Utility Energy Efficiency Efforts* to learn more.)

- Provide performance-based shareholder incentives for investor-owned utilities to ensure that investing in energy efficiency is at least equally attractive as generation and grid resources.

### 3. Conduct independent evaluation and measurement

- Regulators and governing boards should ensure that independent, qualified experts measure and evaluate utility efficiency program savings transparently and consistent with assessments in other jurisdictions. The results are critical to: guarantee utilities can use the savings as a reliable resource substituting for supply-side generation, wires and pipelines; measure program performance relative to targets; confirm cost-effectiveness; improve performance; and quantify emissions reductions.

### 4. Ensure programs address the needs of all customers

- A utility’s energy efficiency program portfolio should ensure all customers have an opportunity to participate and lower their bills, overcome barriers in each market segment, and include a comprehensive set of efficiency measures. This includes pursuing emerging technologies, providing technical support to upgrade building and appliance efficiency standards, delivering education and workforce training, exploring pilot programs, working with key partners like local governments, and offering competitive solicitations for innovative technologies and programs. Some programs also should be targeted toward lower-income households because energy efficiency is a powerful way to make utility bills more affordable, improve the comfort of their homes, and reduce the amount other customers spend to fund bill assistance programs.

## UNLOCKING THE EFFICIENCY OPPORTUNITY

State legislators, regulators, and governing boards of publicly owned utilities have the tools necessary to unlock enormous savings from energy efficiency. (For federal policy recommendations see NRDC fact sheets *Unlocking the Power of Energy Efficiency in Buildings* and *Kick-Starting Building Efficiency*.) State and local policymakers should update policies and practices to enable utilities to become full partners with customers to invest in efficiency whenever it is the most cost-effective way to respond to consumer demand. (See *Doing More and Using Less: Regulatory Reforms for Electric and Natural Gas Utilities Can Spur Energy Efficiency* to learn more.) States that have implemented some or all of the NRDC-recommended policies are reaping the benefits. Unfortunately, research indicates approximately half of U.S. states are barely scratching the surface of potential savings even though efficiency is the smartest way to cut consumption, lower bills, create jobs and jumpstart the transition to a clean energy economy.

### FOCUSING ATTENTION ON SERVICES AND UTILITY BILLS RATHER THAN CONSUMPTION AND RATES

Utility customers care about their monthly bill for the energy services (hot water, lighting, cooling) that power modern life and our economy, not the amount of energy they consume as measured in kilowatt-hours or therms. Adopting policies that encourage utilities to provide the best possible services at the lowest reasonable overall cost to customers is more important than focusing on the cheapest rate per unit.