

# UTILITY RATE DECOUPLING: CONSERVING ENERGY

A Policy Brief by the Center for State Innovation

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## DISCUSSION

Lowering energy consumption saves consumers money, conserves resources for future use, and reduces pollution. But contrary to these benefits, utility companies often have a financial incentive to increase consumption. Because of the way utility rates are traditionally set, utilities increase their revenues by selling more electricity and natural gas. Under this kind of rate setting system, utility investments in efficiency and conservation are discouraged because they will only result in lost revenue.

Every utility must recover two kinds of costs: variable costs and fixed costs. Variable costs reflect the fluctuating ‘inputs’ into the process of producing energy, such as the amount of coal or natural gas a utility must buy to satisfy fluctuating consumer demand and the changing unit prices that the utility’s suppliers charge the utility. Fixed costs include personnel, plant, and equipment, such as power plants and transmission lines.

Public utility commissions have typically allowed utilities to recover costs, and provide for a reasonable profit, by charging a “volumetric” rate— a fixed dollar amount for each volume-based unit of energy consumed. Under this volumetric approach, the two types of costs—variable and fixed—create very different incentives when it comes to encouraging energy efficiency.

In terms of variable costs, utilities don’t care how much electricity or natural gas is consumed because they simply pass along their typically fluctuating costs. But, under the current ‘volumetric’ rate system, utilities care a great deal about the volume of energy consumed when it comes to recovering their fixed costs. Regardless of whether changes in energy consumption are caused by fluctuations in weather, trends within the national and local economy, or energy efficiency, utilities are stuck with their fixed costs and must collect enough revenue to cover them. The lower the volume of energy that consumers use, the less revenue a utility has to pay for its fixed costs. If energy consumption declines significantly for any reason, the reduced volume of energy consumption could so erode the utility’s revenue stream that either it can’t cover its fixed costs or it has nothing left for a profit. Since utilities can’t control either the weather or the economy, they have a perverse interest in slowing down the one thing they have some control over—energy efficiency.

Utility rate decoupling is a way to eliminate the rate structure bias that encourages higher consumption. Public utility commissions can eliminate (decouple) the link between the utility revenues and the amount of energy used by consumers. Done correctly, using less energy will not undermine utility revenue streams or profits.

Decoupling, by itself, will not create an incentive for utilities to promote energy conservation. But it will eliminate the financial incentive to increase the amount of energy that utilities sell.

## About CSI

The Center for State Innovation (CSI) believes every state can achieve shared prosperity, environmental sustainability, and efficient democratic government. We offer evidence-based, outcome-measured, fiscally prudent strategies for doing so.

A non-partisan, not-for-profit institution, CSI provides many types of assistance to state executives interested in implementing progressive policies.

To learn about CSI’s Policy Briefings, Strategy Academies, and other services offered at no cost, visit [www.stateinnovation.org](http://www.stateinnovation.org).



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Under a decoupled rate system, consumers' interest in energy efficiency would no longer conflict with utilities' interest in higher volumes of energy consumption because utilities' ability to recover their fixed costs would no longer depend on the volume of energy consumed. In this kind of system, a rate adjustment mechanism (of which there are several models) is applied after actual sales are known. If sales were lower than forecast, rates can be adjusted upward to compensate the utility. If sales were greater than forecast, rates can be adjusted downward to compensate consumers. Either way, the utility recovers its costs and authorized profit.

The month-to-month effect on consumers is negligible. Lower energy use requires an upward adjustment in rates, so the consumer pays roughly the same amount as they would in a traditional rate system. However, consumers save in the long run because lower energy use requires less investment in new power plants and other parts of a utility's infrastructure. Since these costs are never incurred, they are never passed on to consumers. Consumers therefore benefit from using less energy.

## COSTS

From the perspective of state government, the only cost associated with changing from a traditional rate setting system to a decoupled system is the state employee time invested in learning about the new system and the writing and implementation of new regulations. Once in place, there is no difference in the cost of administering a decoupled system as compared to a traditional rate setting system.

The cost of helping utilities meet their allowable levels of revenue without increasing energy sales is passed on to consumers through periodic rate adjustments. As noted, however, the impact on consumers of decoupled rates has been relatively modest.

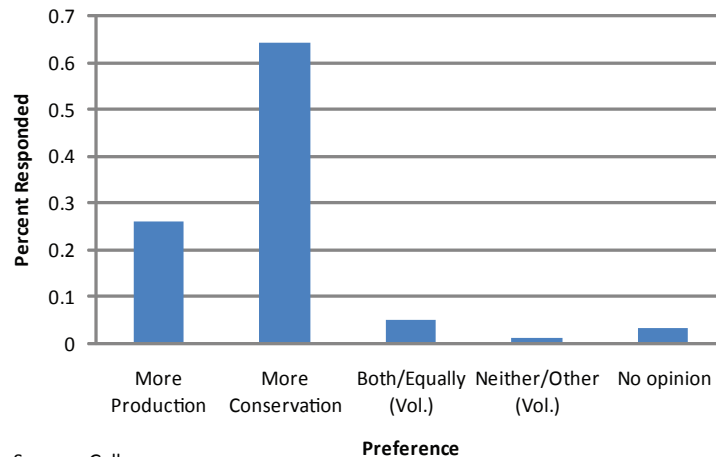
Individual and corporate consumers who respond to the new incentives (or, rather, the removal of their utility's incentive to induce them to consume more energy) by aggressively implementing energy efficiency strategies will be the biggest winners. In the long run, the entire state benefits, as its relative energy costs decline due to comparatively lower levels of demand and a reduction in the magnitude of new fixed costs associated with new power plants. These cost savings to the people and businesses of the state also benefit state government in the form of a more efficient, stronger economy that employs more people and generates more tax revenue.

## PUBLIC PERCEPTION

Because rate decoupling is such a technical issue, there is no direct polling on the subject. However, public opinion polling shows that energy conservation is an important issue to a sizable majority of Americans. Sixty-four percent of respondents to a 2007 Gallup poll indicated that the energy crises should primarily be addressed through conservation, whereas only 26 percent of respondents said that responses to the country's current energy problem should emphasize the production of more oil, coal, and gas (see chart on next page).

## CHART

### Use of Production or Conservation to Solve the Nation's Energy Problems



Source: Gallup

## TALKING POINTS

### *Doesn't decoupling pass on costs to consumers in order to guarantee utilities a profit?*

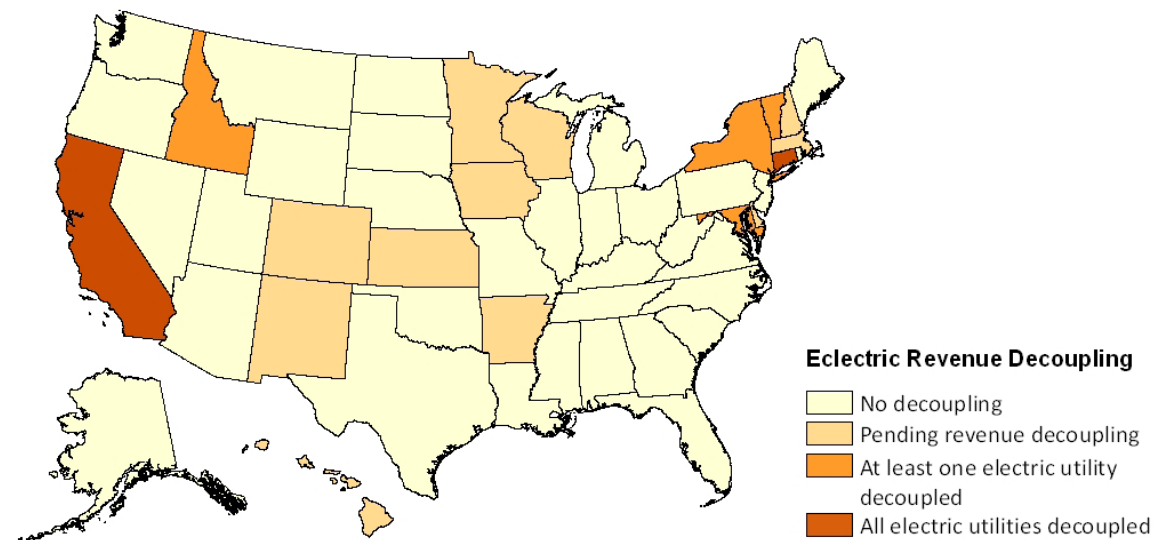
The use of upward rate adjustments, as part of decoupling energy sales volume from revenues, does mean that consumers may initially pay higher rates per unit of energy as a result of consuming less energy. But decoupling has the capacity to produce net savings for consumers. This is because consumers' implementation of energy efficiency programs, which the new decoupled rate structure no longer impedes, means consumers would be better positioned to use fewer units of energy and thus substantially lower their energy costs, despite higher rates per unit. Furthermore, rate adjustments are likely to be relatively modest—between 2 and 3 percent at most—according to an American Council for an Energy-Efficient Economy report. States also have the capacity to protect consumers by capping rate adjustments.

While decoupling allows utilities to secure their allowable revenue, it is neutral with respect to profit. Public utility commissions calibrate and set allowable revenue to enable utilities to pay for both their variable and fixed costs and to permit them to make an adequate profit. Whether this allowable revenue actually translates into a profit depends on a variety of other factors, including the efficiency of the organization. In short, while decoupling affects the rates that utilities may charge and thus helps protect their allowable revenue, it in no way guarantees a profit. Utilities must still hold down their operating costs and operate efficiently in order to make a profit.

## WHO ELSE IS DOING IT?

### *Natural Gas Revenue Decoupling*

- The Regulatory Assistance Project noted in its 2008 report, *Revenue Decoupling: Standards and Criteria*, that ten states have decoupled natural gas revenue (California, Maryland, Missouri, New Jersey, North Carolina, Ohio, Oregon, Tennessee, Utah, and Washington).
- Natural gas revenue decoupling is pending in eight states (Arizona, Colorado, Illinois, Michigan, New York, Tennessee, Virginia, and Wisconsin).



### Electricity Revenue Decoupling

- According to the Regulatory Assistance Project, California and Connecticut were the only two states to decouple electric utilities as of April 2008.
- Idaho, Maryland, New York and Vermont decouple at least one electric utility.
- Ten states have opened investigations or started commissions that are considering electric utility decoupling (AR, CO, DE, HI, IA, KS, MA, MN, NH, NM, WI).

## SPOTLIGHT ON INNOVATION

*California:* California was the first state to adopt decoupling. The Electric Rate Adjustment Mechanism was in place from 1982 until the California Public Utilities Commission began restructuring the electric sector in 1996. After a disastrous experience with deregulation, the California legislature mandated a return to decoupling in 2001 California Act Chapter 8.2

## WHAT CAN YOU DO?

There is not a standard approach governors can take to decouple utility rates. Since governors in most states appoint the members of their state's public utility commissions, however, they have enormous opportunity to promote utility decoupling through their choices of commission members and the priorities they set for their state's policy. Ultimately, any decoupling program will be administered through a state's public utility commission. In some states, commissions have taken up decoupling proactively, while in others, decoupling has been adopted in response to legislation. For state executives interested in decoupling, the "Energy Efficiency Policy Toolkit" created by the Regulatory Assistance Project provides model legislation as well as summaries of state decoupling initiatives.

## RESOURCES

### Policy Reports

American Council for an Energy-Efficient Economy

- “Aligning Utility Interests with Energy Efficiency Objectives: A Review of Recent Efforts at Decoupling and Performance Incentives”

<http://aceee.org/pubs/u061.pdf?cfid=808004&cftoken=98549903>

E4 Energy

- Decoupling Brochure

[http://www.e4energy.org/PDF\\_PR/Decoupling%20Brochure.pdf](http://www.e4energy.org/PDF_PR/Decoupling%20Brochure.pdf)

Progressive States Network

- “Utility Decoupling: Giving Utilities Incentives to Promote Energy Efficiency”

<http://www.progressivestates.org/blog/672/utility-decoupling-giving-utilities-incentives-to-promote-energy-efficiency>

The Regulatory Assistance Project

- “Energy Efficiency Policy Toolkit”

[http://www.raponline.org/Pubs/Efficiency\\_Policy\\_Toolkit\\_1\\_04\\_07.pdf](http://www.raponline.org/Pubs/Efficiency_Policy_Toolkit_1_04_07.pdf)

- “Revenue Decoupling: Standards and Criteria”

[http://www.raponline.org/Pubs/MN-RAP\\_Decoupling\\_Rpt\\_6-2008.pdf](http://www.raponline.org/Pubs/MN-RAP_Decoupling_Rpt_6-2008.pdf)

### Opinion Polls

Gallup

- Gallup Poll (March, 2007)

<http://www.gallup.com/poll/26941/Public-Favors-Environment-Protection-Over-Energy-Production-Priority-US.aspx>