



# Energy Efficiency and the AGA/NRDC Joint Statement

NARUC Natural Gas Committee  
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# Objectives

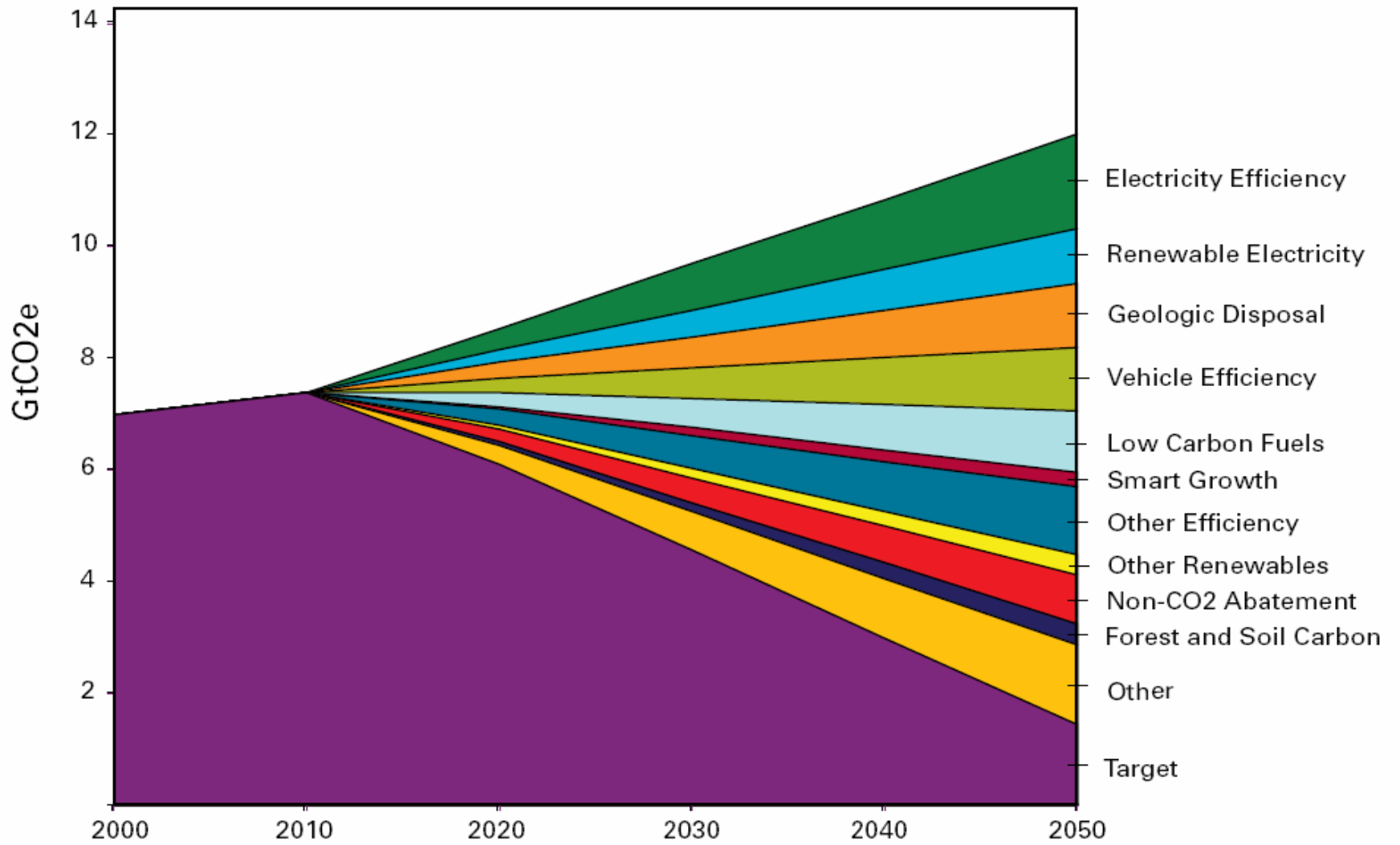
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- Affordable, environmentally friendly and reliable energy services
- Help meet our global warming challenge, reduce consumer costs and improve energy security

## Solution

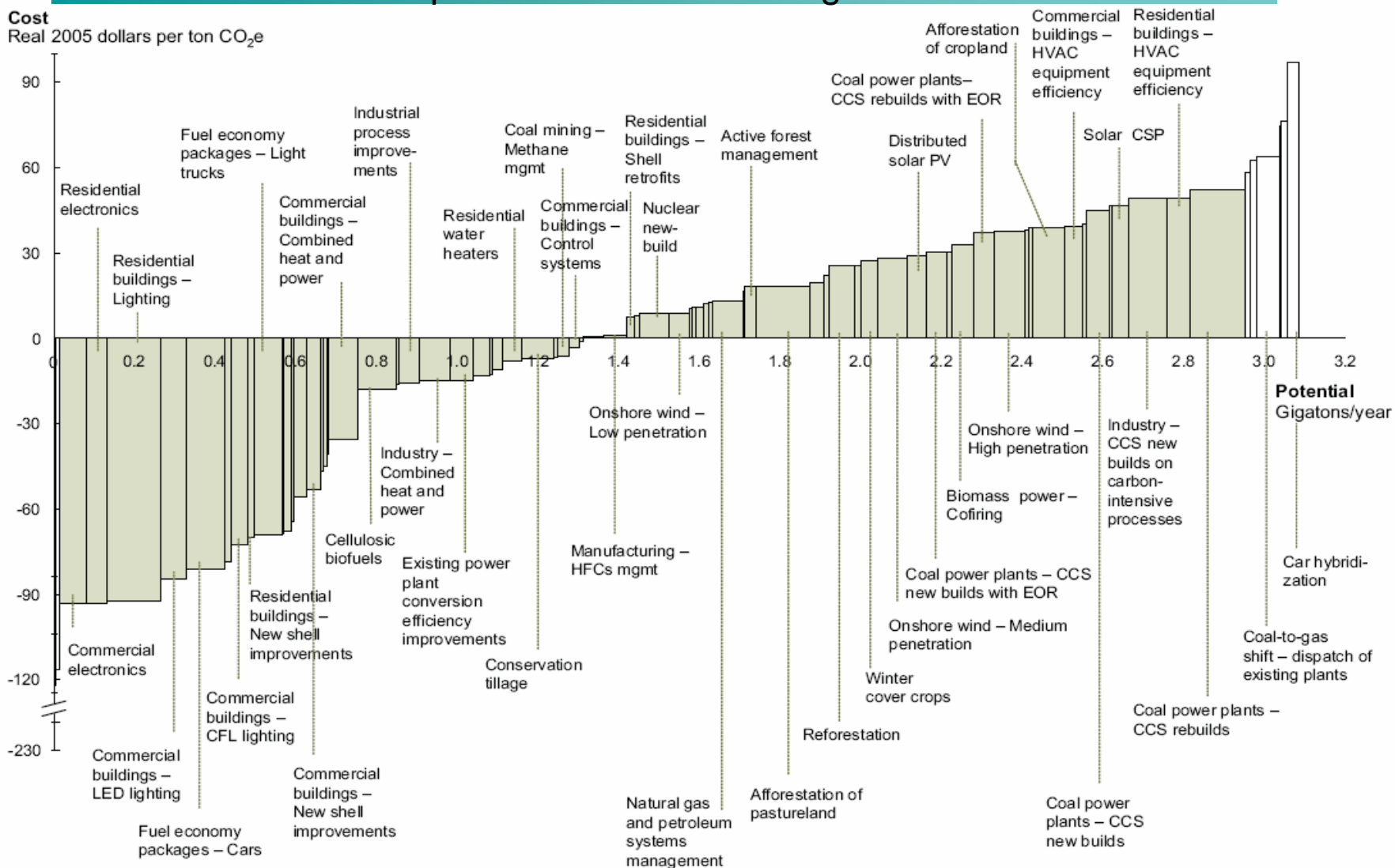
Significantly increase energy efficiency through cost-effective programs, standards and re-alignment of regulatory incentives in ways that work for both consumers and utilities

# NRDC stabilization wedges: Cut 80% by 2050



# Efficiency Can Pay For Supply-side Measures

## 2030 U.S. abatement potential under mid-range commitment and action



# The Regulatory Disincentive

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Regulators or directors establish an electricity sales forecast, determine an authorized revenue requirement (including both fixed and variable costs of production), and set rates by dividing the two.

Sales forecast = 100 kWh

Variable cost = 4¢ per kWh

Fixed cost = \$6.00

Authorized revenue requirement = \$4.00 + \$6.00 = \$10.00

Rate per kWh = 10¢ per kWh (\$10.00 / 100kWh)

BUT, if actual annual electricity sales diverge from the forecast, the utility will either under- or over-recover the fixed-cost element of its revenue requirement.

## Example of Sales *Below* Forecast

Actual sales = 95 kWh

Variable cost = 4¢ per kWh x 95 kWh = \$3.80

Fixed cost = \$6.00

Actual total costs = \$3.80 + \$6.00 = \$9.80

Actual revenues = 95 kWh x 10¢ per kWh = \$9.50

***Utility has under-collected its fixed costs.***

## **Bottom Line:**

**Every kWh of *reduced* sales loses \$ in fixed cost recovery;**

**Every kWh of *increased* sales yields a \$ windfall.**

# The Solution: Eliminating Disincentives

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Use modest, regular true-ups in rates to ensure that any fixed costs recovered in kilowatt-hour charges are not held hostage to sales volume.

If sales are higher than expected (and approved by the Commission), return over-collected revenues to customers, and vice versa.

Maintain volumetric prices to provide customers with conservation incentive.

Illustration of True-up for Utility Over-collection of \$0.30:

- Sales forecast for the following year = 100 kWh
- Variable cost = 4¢ per kWh (no change from prior year)
- Fixed cost = \$6.00 (no change from prior year)
- Revenue requirement = \$4.00 variable cost + \$6.00 fixed cost – \$0.30 over-collection = \$9.70
- Rate per kWh = 9.7¢ per kWh ( $\$9.70 / 100 \text{ kWh}$ )

*The utility's rate is adjusted to return the \$0.30 that was over-collected the past year to customers.*



# Performance-Based incentives

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*Cost-recovery assurance and removing the disincentive to invest in energy efficiency will not put energy efficiency on financial par with steel in the ground.*

Must be based on:

- exemplary performance
- independent measurement and verification of results  
(Rigorous and Systematic Measurement of Savings is Key to Making Efficiency a Reliable Procurement Resource)
- reasonable earnings levels