



Preferred Resources In The Context of A Multi-Year Forward Resource Adequacy Requirement

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CPUC Workshop, R.14-02-001
May 2, 2014



Types of Forward Capacity

System

Local

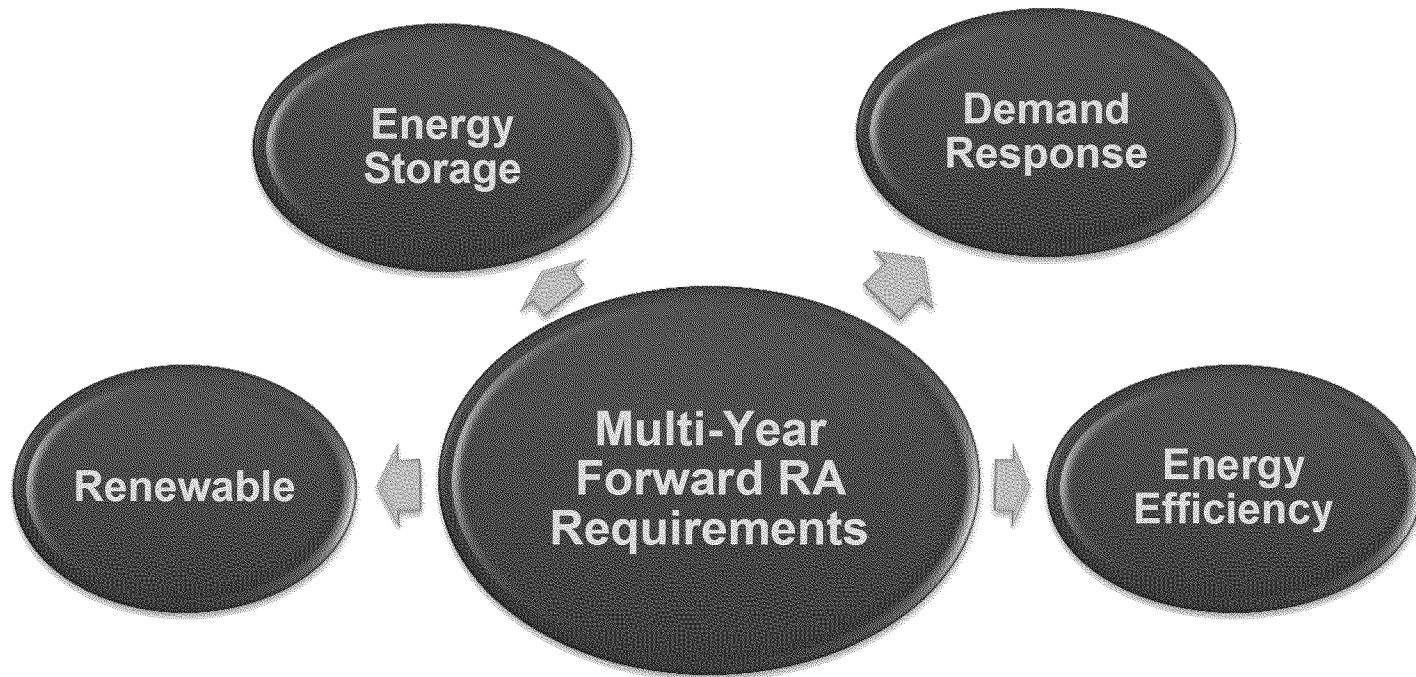
Flexible

Which kinds of capacity should be subject to forward procurement requirements?

- For all types, key priority is to ensure that preferred resources are allowed to meet needs
 - ✓ On level playing field with other resources
 - ✓ Define characteristics not technologies
- Too early to select types: Track 2 deficiencies not demonstrated yet



Impact on Preferred Resources



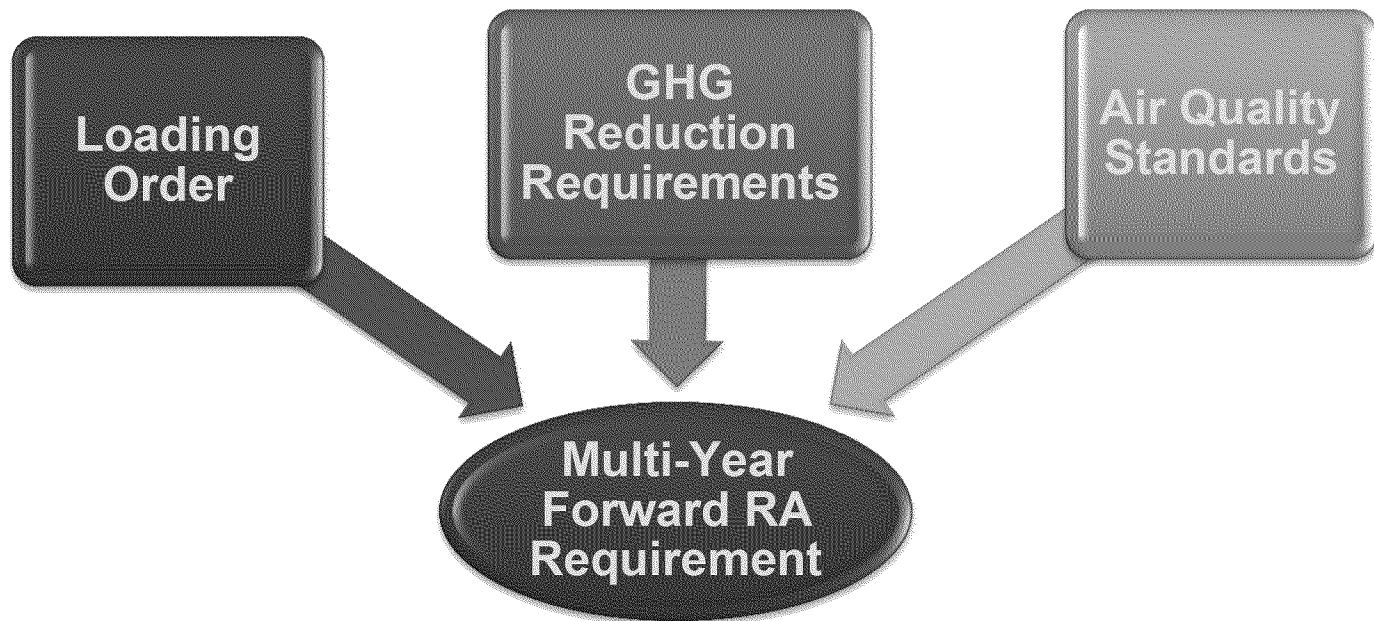
Positive or negative impact on the development of preferred resources?

Depends on a number of factors

- Resource type: dispatchable or non-dispatchable
- The counterfactual: what LSEs would procure otherwise
- Policy design: focus on attributes or technologies

If done correctly, there is the potential for positive impact.

Consistency With State Policies



What design elements ensure consistency with the loading order and other environmental goals?

Key elements:

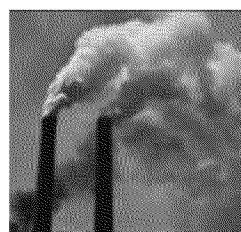
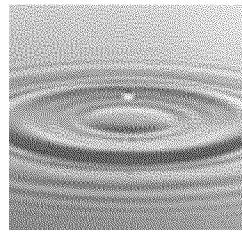
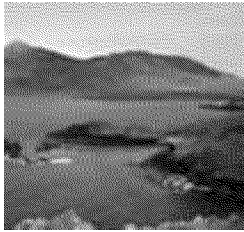
- Subtract all i) reasonably expected to occur, ii) cost-effective iii) demand side, and iv) non-dispatchable resources from demand forecast *first*
- Fill identified needs according to loading order and:
 - ✓ Defining needs in technology-neutral terms
 - ✓ Defining reasonable operational requirements

Contact Info

Thank you.

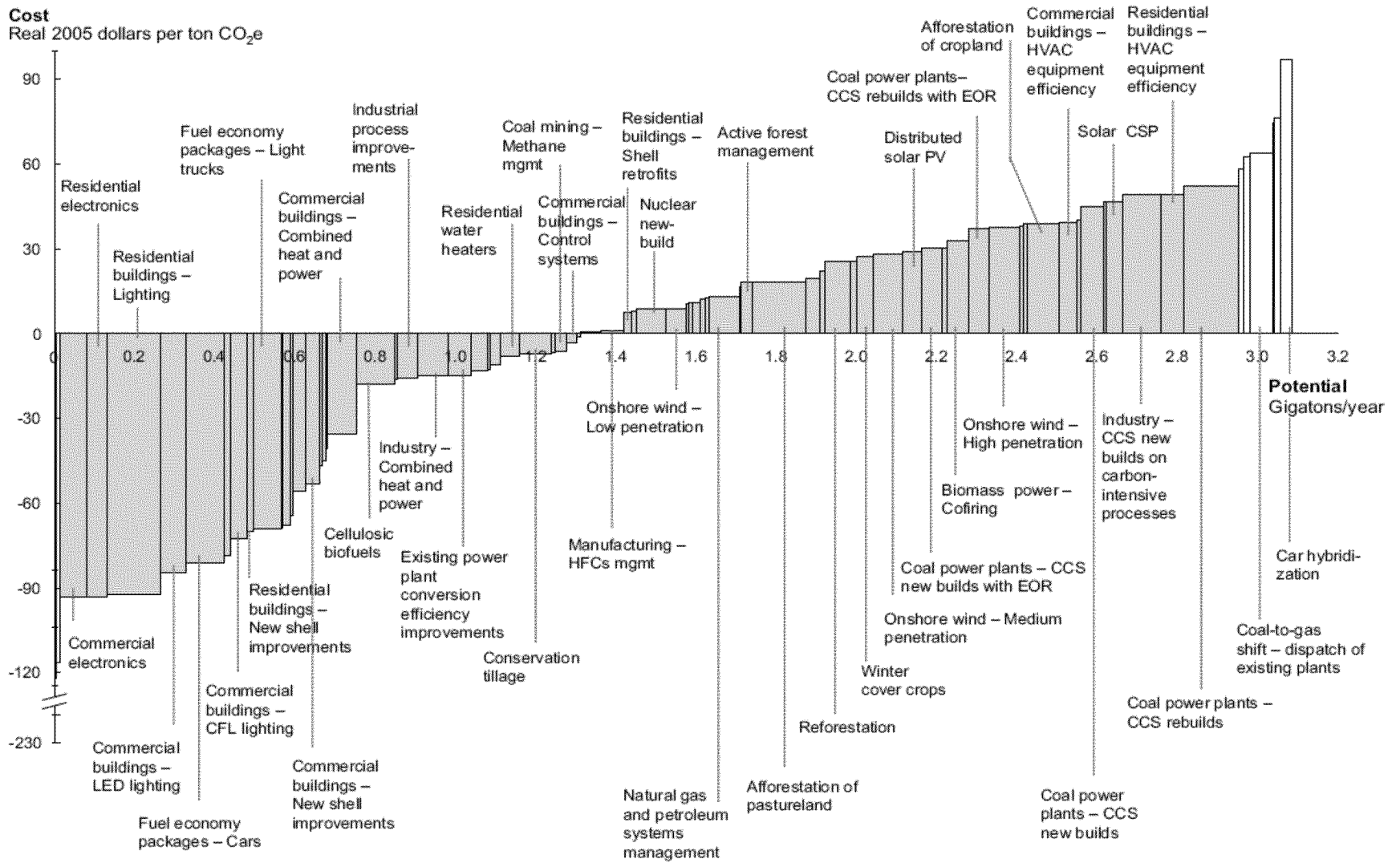
Questions?

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Efficiency Is A Key Resource

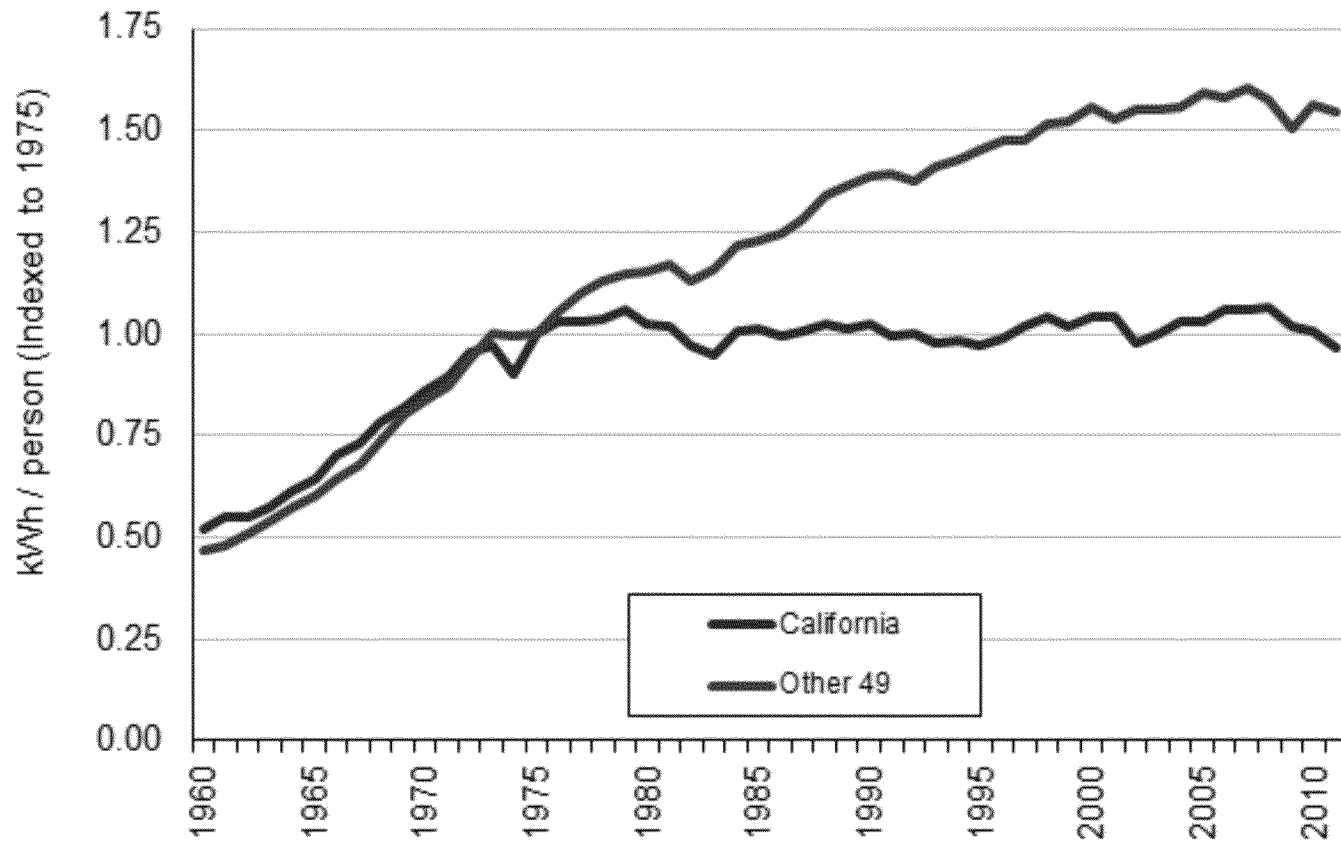
2030 U.S. abatement potential under mid-range commitment and action



Source: McKinsey & Company, December 2007



Per Capita Electricity Consumption

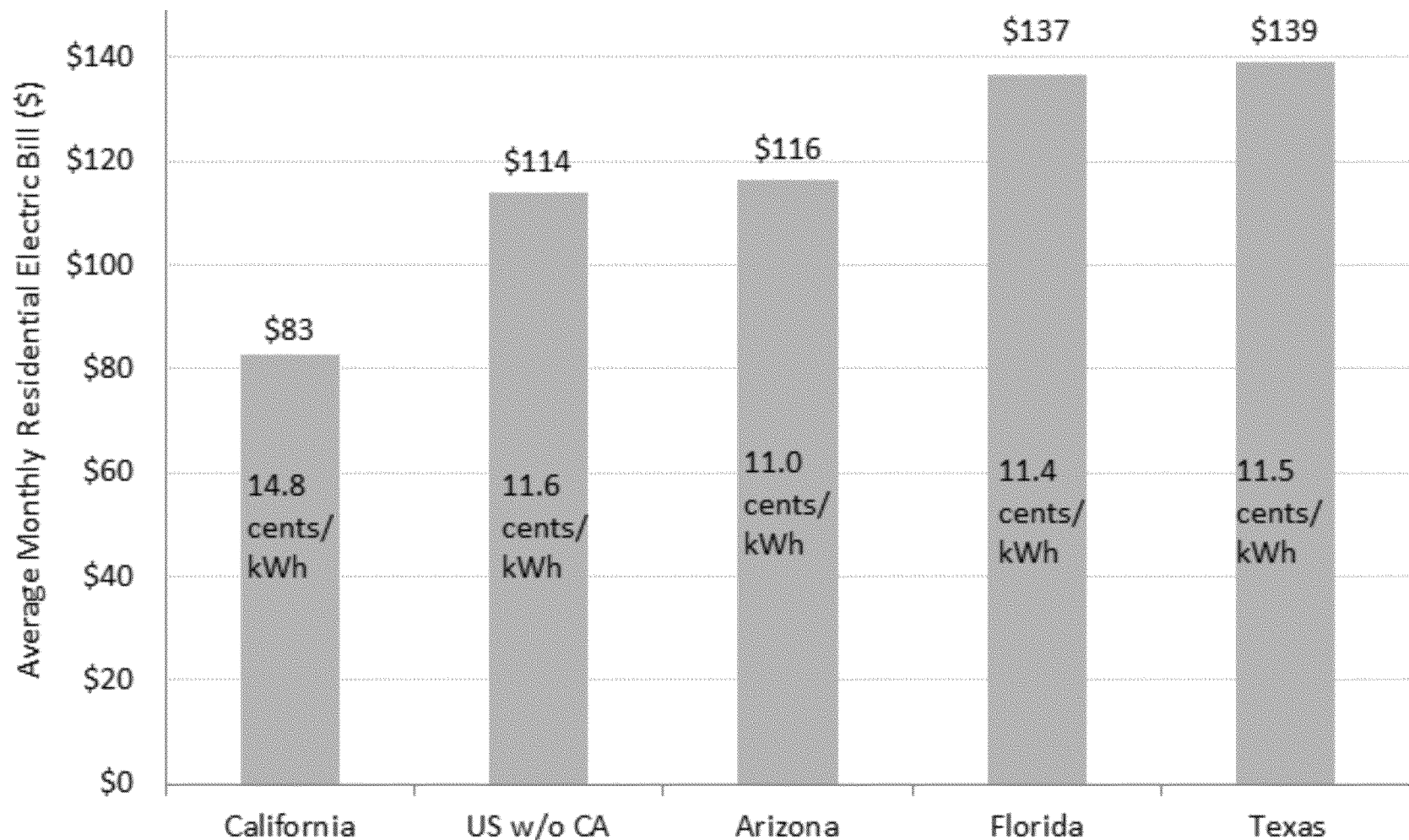


Source: EIA, 2013

- Industrial consumption only accounts for 20% of the difference between CA & US



Measuring Financial Savings: Rates v. Bills

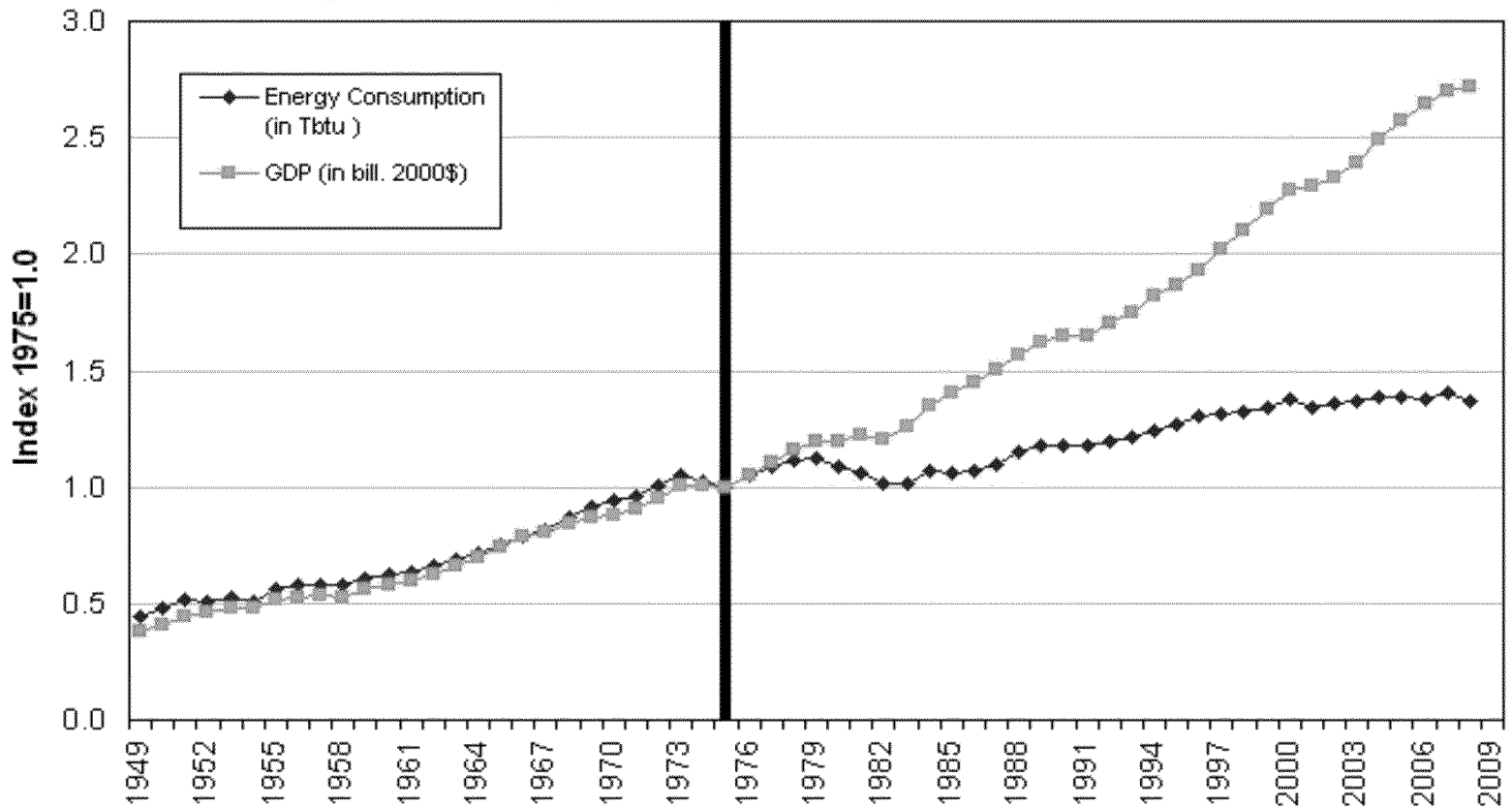


Source: US EIA, 2012



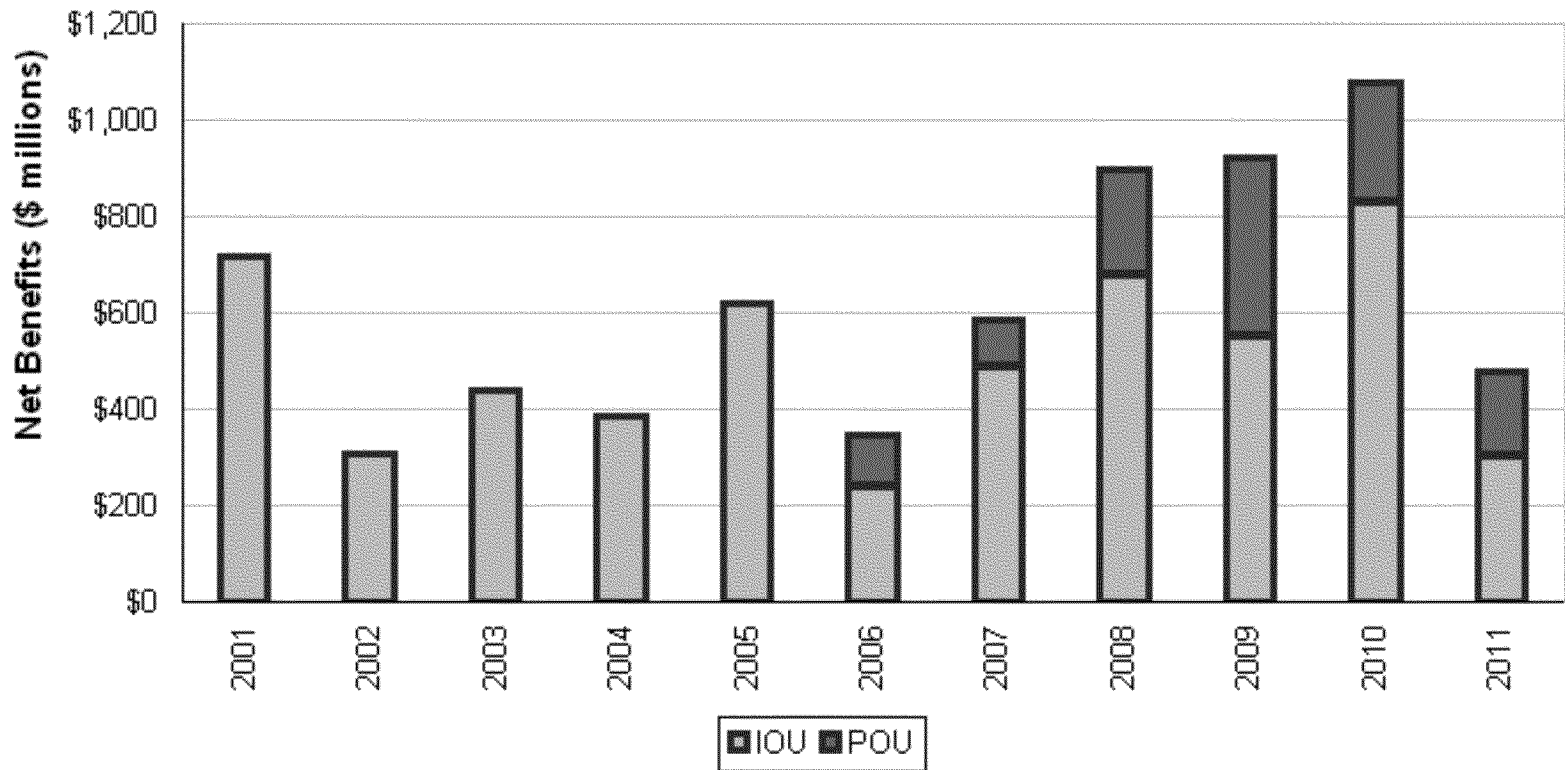
Impacts on Actual Consumption

Figure 2: Energy Intensity of US Economy 1949-2008



- In post-World War II America, our energy consumption was increasing in lockstep with our production of wealth; but after deploying strong efficiency policies, that link was broken
- From 1949-1975, energy consumption increased by 125%; over the next 26 years, it slowed to 37%.
- Energy efficiency can reduce our energy consumption faster than our economy grows

Measurement of Net Benefits from Programs



Sources: CPUC Verification Reports, Incentive Decisions, AEAP Reports, SB 1037 Reports, incentive payments subtracted

- Net Benefits are financial benefits above and beyond the cost of the programs
- Programs provided customers nearly *\$7 billion* in net benefits over the last decade

