

**Federal Energy Efficiency
Resource Standard (EERS)**

*Jobs, Consumer Savings
Cleaner Environment*

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Today's Energy Challenges

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- Energy Consumption Growing (except for the current recession)
- Global Warming Emissions Increasing
- Electric and Natural Gas Prices Rising

Today's Energy Solution: Efficiency

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Faster: Available now

Cheaper: Saves consumers money, costs less than half of building new power plant

Cleaner: Little or no GHG emissions

Better: Creates jobs, new green economy

What is Energy Efficiency?



- Energy efficiency means getting more out of the energy we consume
- Energy efficiency means using
 - Compact florescent light bulbs
 - Efficient windows and insulation
 - Latest technology home appliances and office equipment
 - Combined heat and power systems
- Energy efficiency **does not mean** conservation, which is changing behaviors to reduce energy use

What is an Energy Efficiency Resource Standard (EERS)?



- An EERS requires gas and electric utilities to meet specified energy savings targets within a given timeframe.
- A federal EERS would set a national target for gas and electric utilities to meet, but allow states flexibility on how to achieve the targets
- A strong EERS will reduce electricity usage by 15% and natural gas usage by 10% by 2020

EERS: Easy Path to Significant Energy Savings

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In 2020 EERS will achieve savings of 15% in electricity use, 10% in natural gas use as a result of programs operated over the previous decade

Incremental Annual Savings

	Electric	Natural Gas
2012	0.67%	0.50%
2014	1.25%	1.00%
2016	1.50%	1.25%
2018	2.50%	1.25%
2020	2.50%	1.50%
Total in 2020	15.00%	10.00%

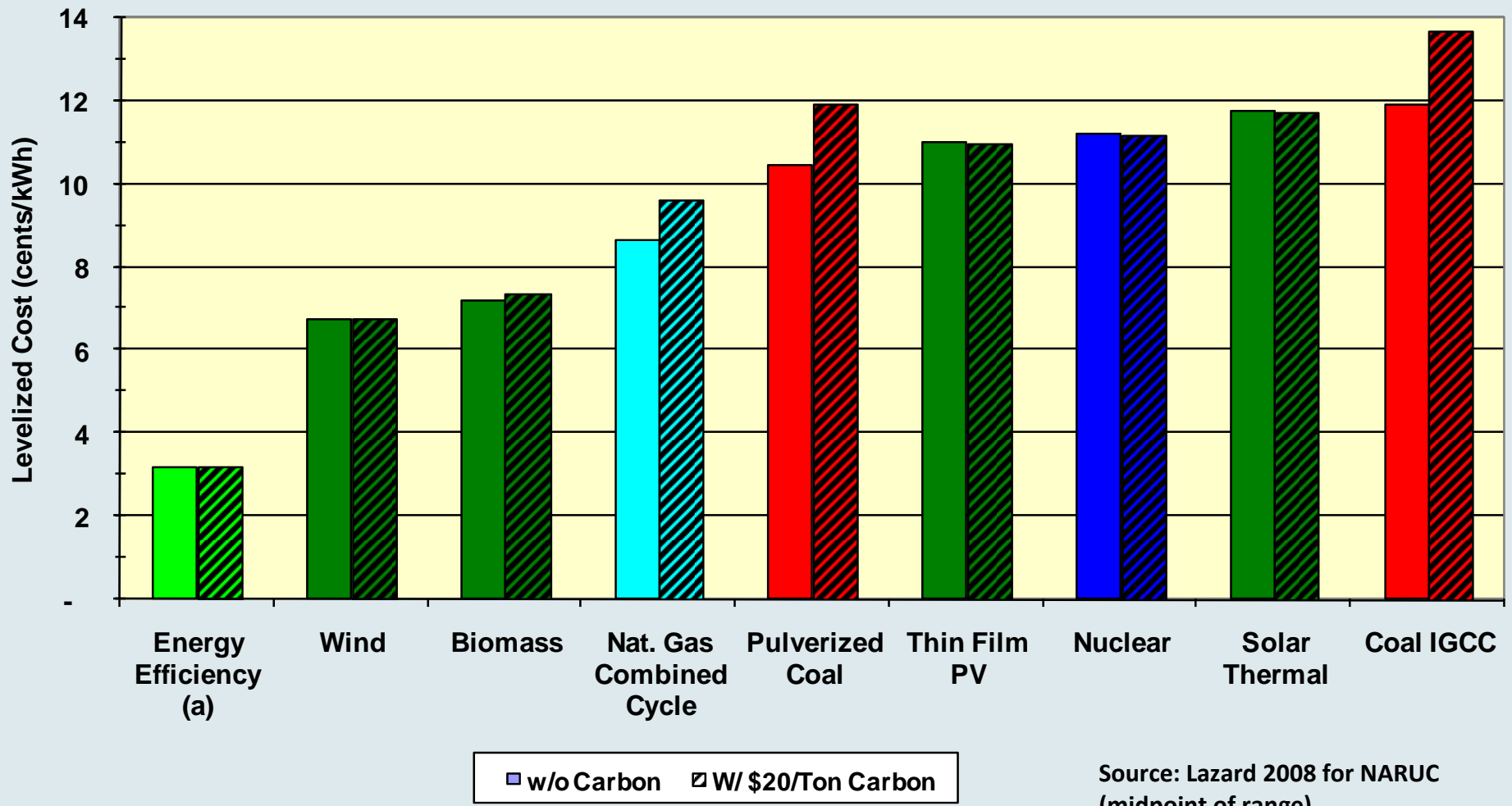


- Energy Efficiency is available now
- New coal power plant: 6 to 8 years to permit and build
- Nuclear plant: over a decade to permit and construct



- 15/10 by 2020 EERS would save \$169 billion consumers and businesses
- For every \$1 invested in efficiency, consumers save approximately \$3
- Efficiency programs deliver efficiency for 3-4 cents per kWh; $\frac{1}{4}$ - $\frac{1}{2}$ the cost of new gas, coal and nuclear plants

Cost of New Electricity Resources



Energy Efficiency Programs

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- Utilities offer discounts and rebates in order to encourage residential and business customers to invest in energy-use reduction measures
- Residential programs may include discounts for compact fluorescent light bulbs, home weatherization, Energy Star refrigerators, air conditioning and furnace tune-up programs
- Commercial and industrial programs include improvements to lighting and heating and cooling in buildings, as well as industrial equipment and processes

Case Study: ComEd (IL) Real Savings for Real Consumers

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- Over 2 years (2009-2010) ComEd's discount CFL program will discount compact florescent light bulbs (CFLs) by \$1.50 per bulb
- They project 11 million new CFLs in customers' homes
- Each CFL will save customers \$7 per year
- This means \$42/year savings for 6 CFLs

Case Study: Connecticut State Program



- Connecticut Energy Efficiency Fund (CEEF) is a partnership with United Illuminating Company (UI) and other utilities to provide energy efficiency assistance and incentives
- XtraMart convenience store in North Haven received \$4,500 incentive from UI for \$5,600 efficiency upgrade; cost to store - \$1,100
- New controls for more efficient operation of refrigeration system fans and heaters save over 26,000 kWh per year
- Annual savings to XtraMart: \$2,500

Case Study: Nevada State Program



- Sierra Pacific Power and Nevada Power Companies' "Sure Bet Program" provides business, industrial and institutional incentives
- In 2006 the Nugget Casino in Sparks, NV received a \$10,000 incentive under the Sure Bet Program
- Replaced over 5,000 incandescent lamps with LED; anticipates saving over 244,000 kWh annually
- Project cost \$54,500; after 2 year payback period Casino will save roughly \$26,800 per year in electricity costs

Energy Efficiency: Creates Jobs

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- The American Recovery and Reinvestment Act includes \$25 billion stimulus funding for energy efficiency programs that will create ~120,000 jobs
 - \$5 billion to install efficiency measures in low-income households would create ~22,000 jobs.
- Federal EERS will extend benefits of recovery bill: 15% electric/10% gas savings will create 222,000 permanent jobs in construction and other fields

Energy Efficiency: Green Economic Growth

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- Energy efficiency drives innovation through development and sales of energy efficiency products and technologies
- Makes U.S. more competitive in global marketplace
- Consumer savings -- \$169 billion by 2020 -- reinvested in other areas of the economy



- Little or no greenhouse gas emissions
- EERS with 15% electric/10% gas savings by 2020 would
 - eliminate need for 390 new power plants
 - cut GHG emissions equal to taking 48 million cars off the road for one year

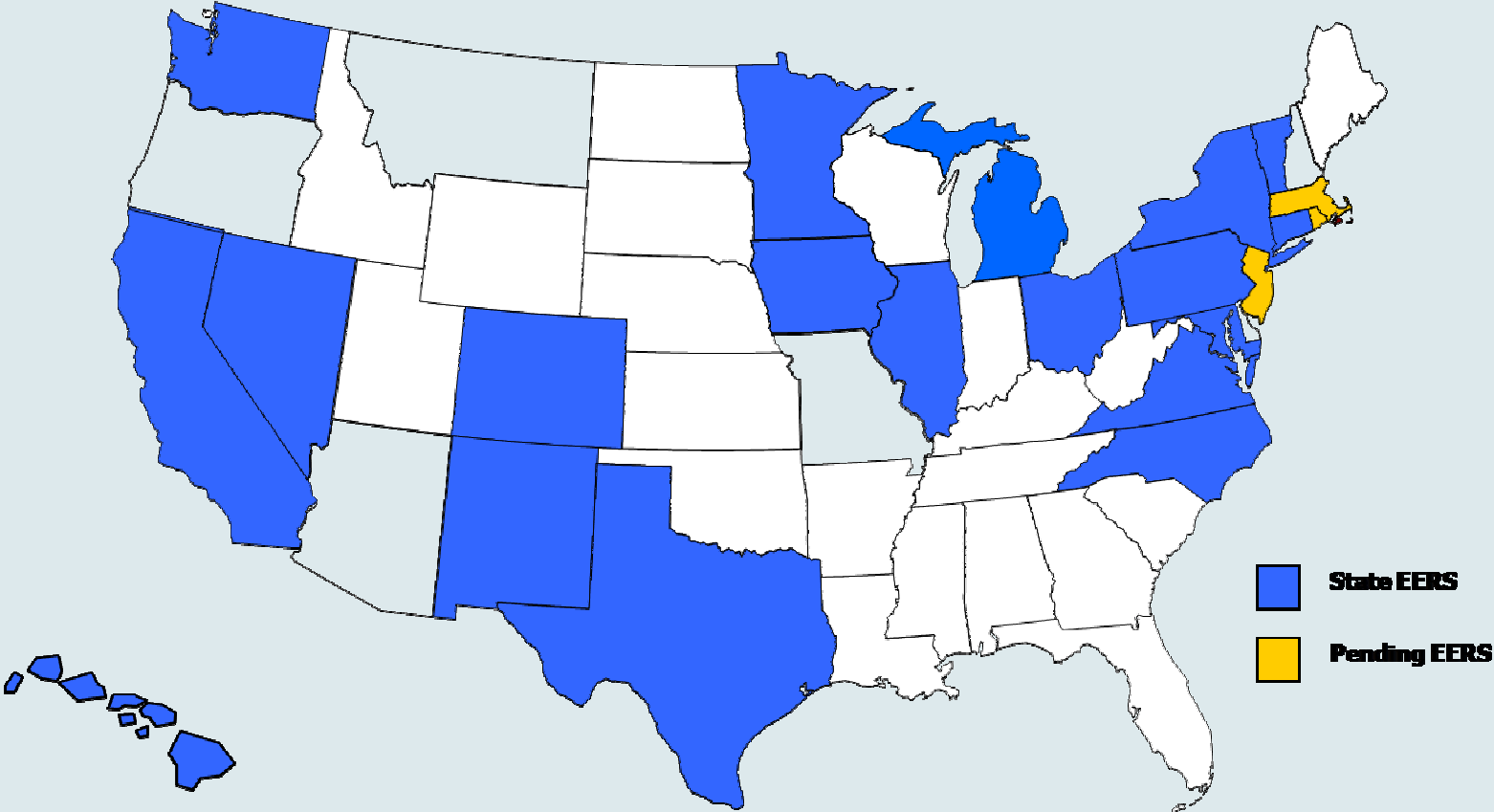
19 States Have Efficiency Standards



- Federal standards set a floor; states are free to set higher targets to gain additional savings
- Some states, such as Connecticut and Vermont already exceed the proposed standards and those programs will not be affected

State EERS

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■ Save American Energy Act

- Rep. Ed Markey (D-MA) H.R. 889
- Sen. Charles Schumer (D-NY) S. 548
- 15% electric/10% gas savings by 2020

■ American Clean Energy and Security Act (Discussion Draft)

- Rep. Henry Waxman (D-CA) and Rep. Ed Markey (D-MA)
- 15% electric/10% gas savings by 2020

EERS Makes Global Warming Solution Faster, Cheaper, Better

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- Energy efficiency reduces the need for expensive new power plants, which in turn reduces the cost of generating power and cuts greenhouse gas emissions, while also creating jobs and lowering consumer's utility bills
- ACEEE analysis shows that electricity prices under cap-and-trade legislation will be 15 percent less if an EERS and RES are also in place



EERS and RES Lower Energy Prices

ACEEE's analysis shows that adding an EERS and Renewable Electricity Standard (RES) basically returns wholesale electricity prices in 2025 to where they would be without any cap in place.

