

**The Role of the U.S. Department of Energy
in Energy Efficiency Rulemaking and Standards
Office of Energy Efficiency & Renewable Energy
Building Technologies Program
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Implement policy to achieve national goals

Improve quality and efficiency of products and buildings

- **Avoid competitive disadvantage for the most efficient products**
- **Support existing standards**
- **Set higher standards that are technically justified & economically feasible**
- **Prioritize for those areas that will yield the greatest net benefits**

Steps for setting codes

- **Establishing the technical level of the code**
- **Working to have that code adopted by the code organizations**
- **Developing tools and other information to accelerate code adoption and enforcement**
- **Aiding directly in the adoption of codes by states and localities through educational forums, technical support, etc.**

Legislated Requirements: Seven Factors

The economic impact of the standard on the manufacturers and on the consumers of the products;

The savings in operating costs throughout the estimated average life of the product compared to any increase in the price or maintenance expenses of the product;

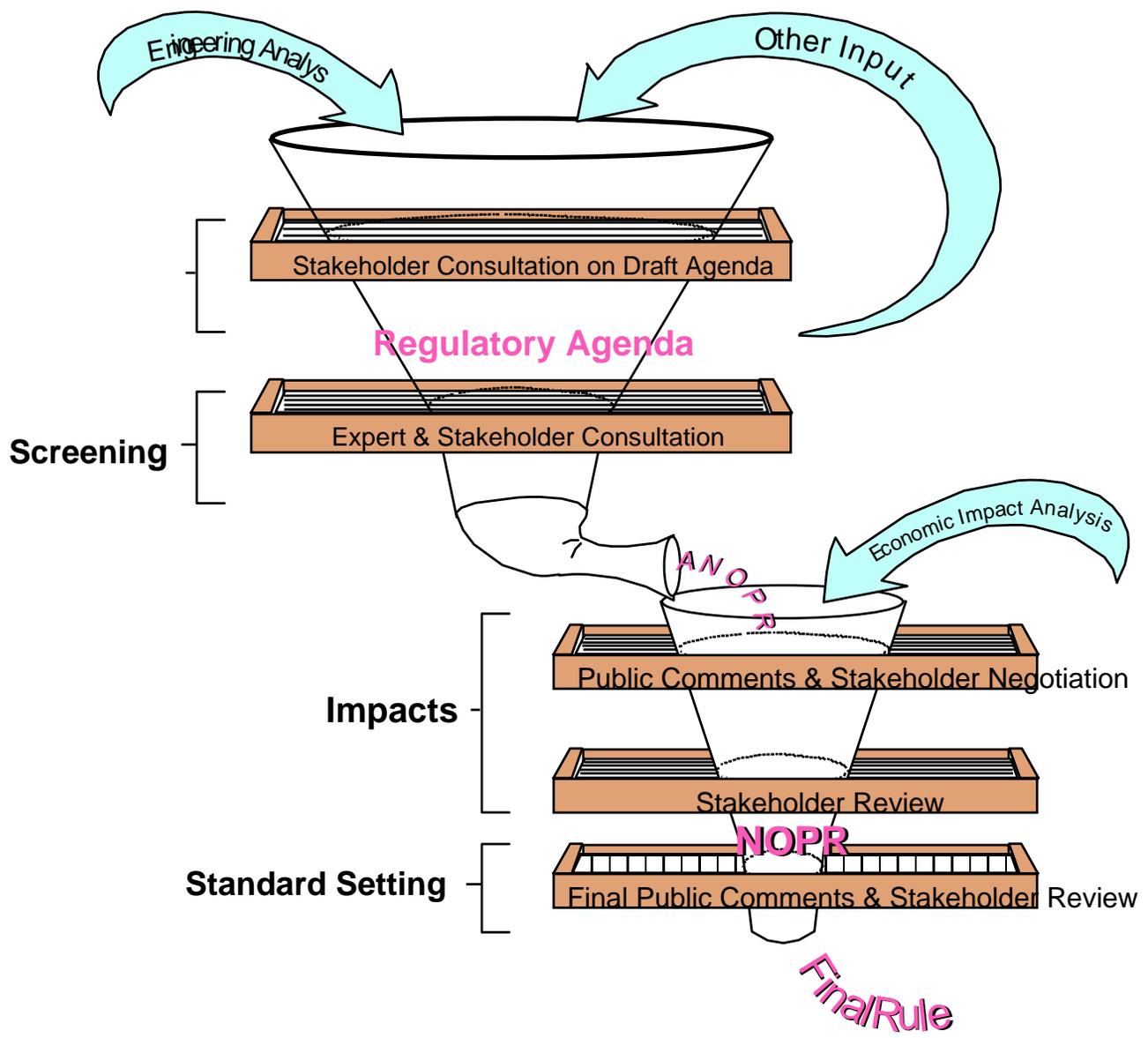
The total projected amount of energy savings likely to result from the standard;

Any lessening of the utility or performance of the product;

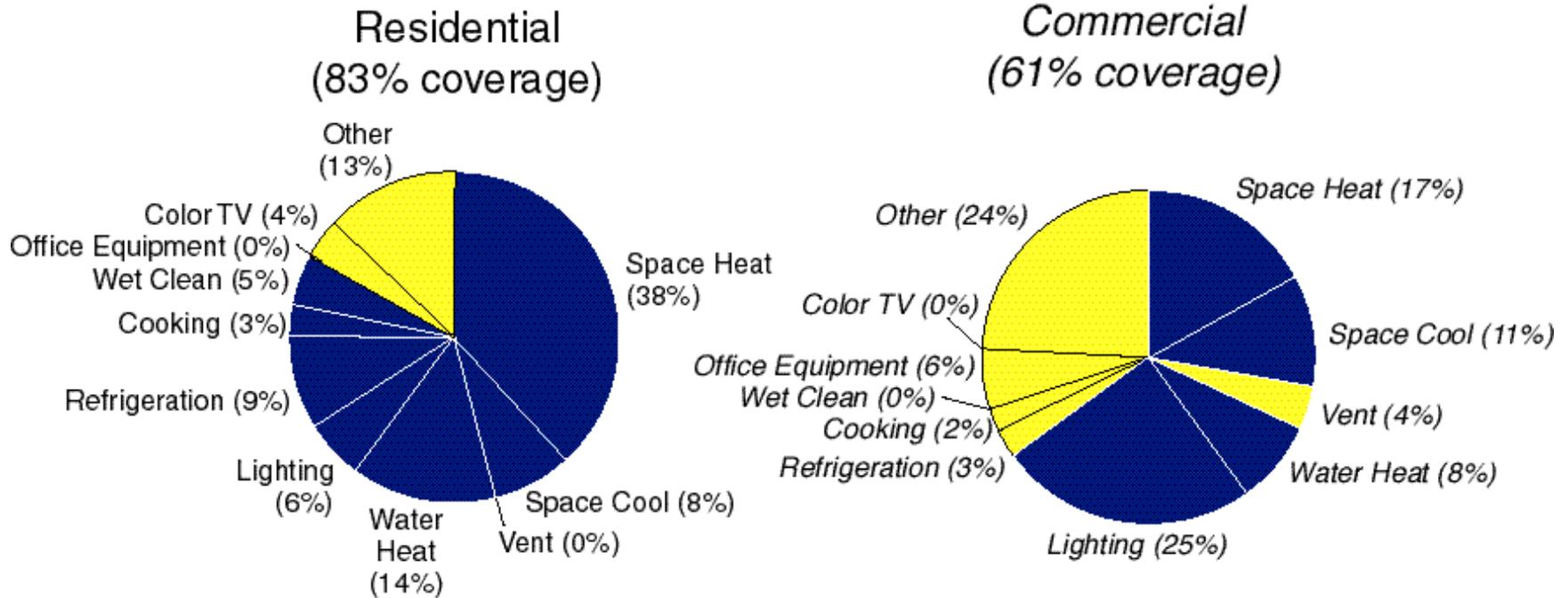
The impact of any lessening of competition as determined by the Attorney General;

The need of the nation to save energy; and

Other factors considered relevant.

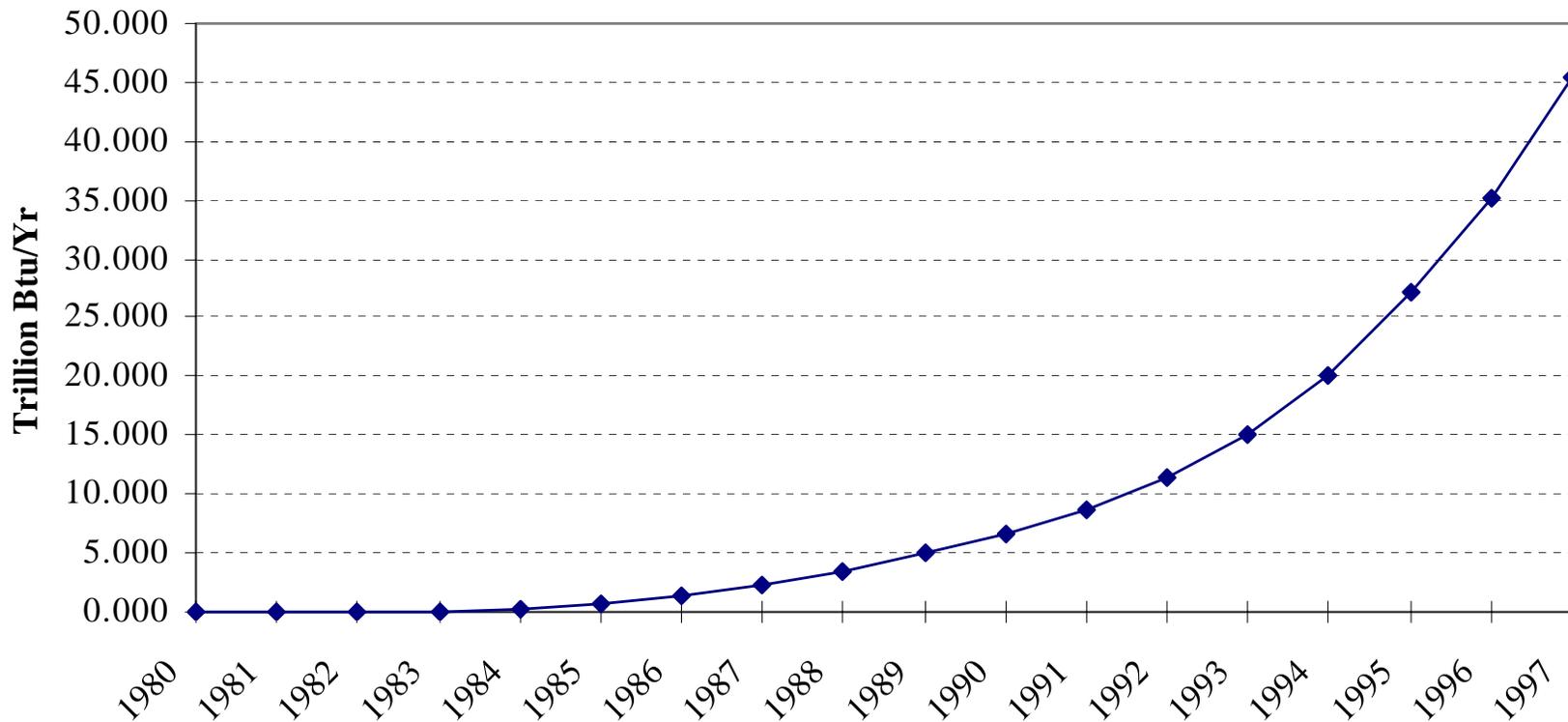


U.S. Energy Efficiency Standards Affect Products Using Most of Buildings' Primary Energy



Cumulative Energy Savings Due To Residential & Commercial Energy Efficiency Codes & Standards

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Benefits of DOE Energy Efficiency Standards

Office of Energy Efficiency & Renewable Energy

Building Technologies Program

	2003 Annual Savings			1980 – 2005 Cumulative Savings		
	Residential	Com- mercial	Total	Residential	Com- mercial	Total
Energy (T Btu)	3.736	42.858	46.504	28.914	318.301	347.214
Cost (million 1994\$)	26.992	315.089	342.081	204.844	2330.206	2535.05
Carbon (MM Ton)	0.070	1.021	1.091	0.514	7.573	8.087
SO ₂ (000 Tons)	0.649	16.988	17.636	3.886	125.830	129.716
NO _x (000 Tons)	0.480	7.749	8.229	3.445	57.443	60.888

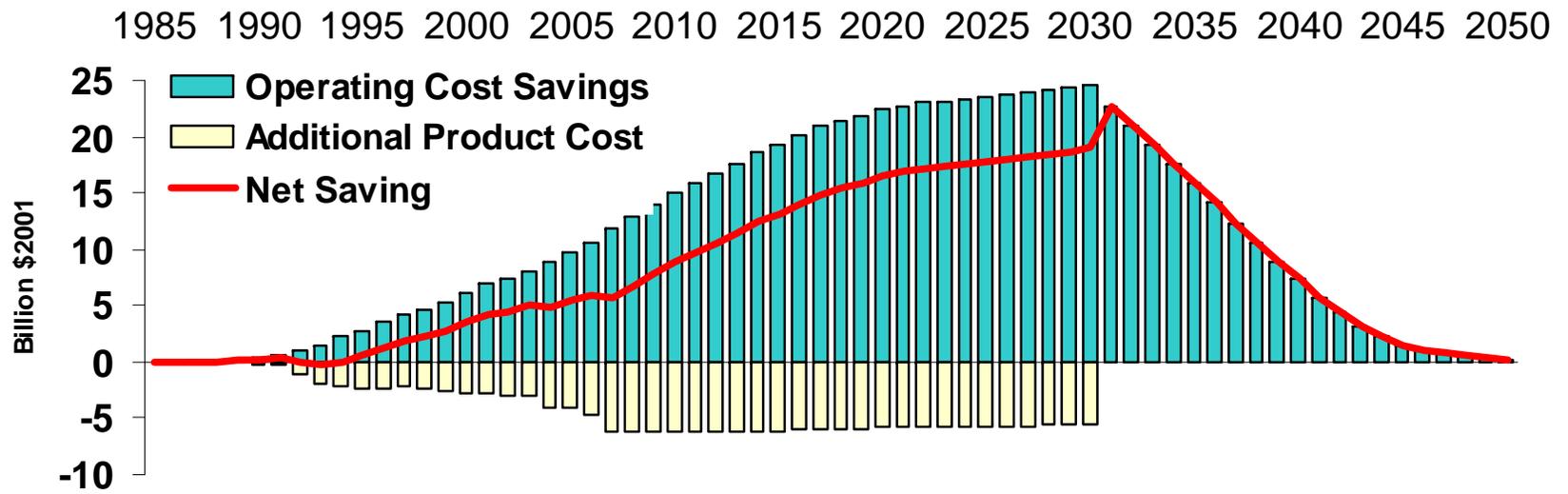
Benefits of Residential Appliance Standards Program

Appliance	Benefits – Cumulative				
	Energy Savings (Quads)	NPV Savings (\$ Bil.)	Water Savings (trillion gals)	NOx (kt)	Carbon Equiv. (Mt)
Refrigerators and Freezers (NAECA) ⁸	6.1	17.82			
Refrigerators and Freezers (First update) ¹¹	5.2	9.1			
Refrigerators and Freezers (Second update) ¹⁰	6.67			1362	126.8
Room Air Conditioners (NAECA) ⁹	1.22	2.46			
Room Air Conditioners (First update) ³	.64	.51		95	14.7
Central Air Conditioners (NAECA) ²	4.3	7.89			
Central Air Conditioners (First update) ⁷	3.0	2.0		73	24
Clothes Dryers (First update) ¹	.82	1.3		196	17.9
Clothes Washers (First update) ¹	.57	.53	.006	107.8	11.7
Clothes Washers (Second update) ⁴	5.52	15.3	11.59	253.5	95.1
Dishwashers (First update) ¹	6.29	.43	.24	173	17.9
Water Heaters (NAECA) ⁹	3.39	10.02			
Water Heaters (First Update) ⁶	4.6	2.0		273.0	152
Gas Furnaces (NAECA) ²	8.04	8.31			
Flourescent Lamp Ballasts (First Updates) ⁵	1.2 - 2.3	2.4 -3.9		34 - 60	11 - 19

1 - 1993-2015 (1987 dollars discounted to 1987 @ 7%)
 2 - 1992-2030 (1999 dollars discounted to 1999 @ 7%)
 3 - 2000 -2030 (1990 dollars discounted to 1990 @ 7%)
 4 - 2004 -2030 (1997 dollars discounted to 1999 @ 7%)
 5 - 2003 -2030 (1997 dollars discounted to 1997 @ 7%)
 6 - 2004 -2030 (1998 dollars discounted to 1998 @ 7%)

7 - 2006 -2030 (1998 dollars discounted to 1998 @ 7%)
 8 - 1990 -2030 (1999 dollars discounted to 1997 @ 7%)
 9 - 1990 -2030 (1997 dollars discounted to 1997 @ 7%)
 10- 2001- 2030 (199? dollars discounted to 199? @ 7%)
 11- 199?- 20?? (199? dollars discounted to 199? @ 7%)

Annual Impacts of DOE Appliance Standards - Residential





U.S. Department of Energy
Energy Efficiency and Renewable Energy

3) Отойти от выбора по критерию низкой стоимости приобретения

