

Assessment of Selected Energy Efficiency Policies

Table ES1. Policy Impacts Relative to the AEO2005 Reference Case
(Quadrillion Btu)

	2010	2015	2020	2025	Cumulative 2006-2025
Primary Energy Use by Sector in the AEO2005 Reference Case					
Residential	23.47	24.58	25.56	26.62	491.5
Commercial	20.29	22.18	24.24	26.74	449.6
Industrial	35.47	36.58	38.19	39.53	737.4
Transportation	32.04	34.96	37.61	40.28	700.9
Total	111.27	118.29	125.60	133.18	2,379.4
Change in Energy Use from the Reference Case by Sector and Policy					
Residential					
Ceiling Fan Efficiency Standard	-0.055	-0.127	-0.214	-0.300	-2.736
Furnace/Furnace Fan Standard	-0.012	-0.076	-0.119	-0.153	-1.551
Torchiere Lamp Standard	-0.044	-0.086	-0.088	-0.092	-1.371
Building Codes (HUD Type)	-0.005	-0.009	-0.013	-0.016	-0.184
Building Codes (Non-HUD Type)	-0.020	-0.097	-0.186	-0.264	-2.253
New Home Tax Credits	-0.001	-0.001	-0.001	-0.001	-0.024
Existing Home Tax Credits	-0.024	-0.021	-0.020	-0.018	-0.406
Equipment Tax Credits	-0.011	-0.011	-0.008	-0.005	-0.166
Commercial					
Air Conditioner Efficiency Standard	-0.011	-0.052	-0.078	-0.097	-0.986
Refrigerator Efficiency Standard	-0.001	-0.003	-0.005	-0.006	-0.059
Pre-rinse Spray Valve Standard	-0.045	-0.077	-0.077	-0.078	-1.235
Distribution Transformer Standard	0.000	0.000	0.000	0.000	-0.001
Equipment Tax Deductions	-0.005	-0.003	-0.002	-0.001	-0.053
Building Codes	-0.085	-0.238	-0.379	-0.529	-5.047
Other Policies Modeled Using NEMS					
CAFE Reform, Fuel Economy Testing	-0.258	-1.125	-1.582	-1.942	-20.581
CHP Tax Credits ¹	NA	NA	NA	NA	NA
Multi-Policy Cases, Including EEPS and Voluntary Policies					
Case 1	-0.603	-2.005	-2.868	-3.914	-39.759
Case 1 Subset ²	-0.399	-1.493	-2.022	-2.663	-27.346
Case 2	-1.530	-4.517	-7.258	-9.335	-93.443

CHP: Combined heat and power. HUD Type: Manufactured homes regulated by the U.S. Department of Housing and Urban Development. NA: not applicable.

¹The induced increase in CHP capacity increases commercial and industrial energy consumption while decreasing electric power sector consumption. The overall effect is a reduction in primary energy use of less than 0.005 quadrillion Btu per year, the amount dependent on the type of power plants displaced. With the relatively small change in CHP capacity, a precise estimate of the differences in energy use is unavailable, given the solution tolerances in NEMS.

²This case includes all the policies in Case 1 except for the five-State EEPS and the industrial voluntary agreements case.

Source: Energy Information Administration, National Energy Modeling System. AEO2005, run AEO2005.D102004A; Case 1, run DORG_V1.D031105A; Case 2, run DORG_V2.D031105A; Case 1 Subset, run DORG_V1E.D041305A. Other results from individual sector model test runs derived from the reference case and multi-policy runs.