

Analysis of Strategies for Reducing Multiple Emissions from Electric Power plants with Advanced Technology Scenarios

Table ES3. Energy Market Projections in the Reference and Advanced Technology Cases, 2007

Projections	1999	2007			
		Reference		Advanced Technology	
		Without Emissions Limits	With Emissions Limits	Without Emissions Limits	With Emissions Limits
Primary Energy Consumption (Quadrillion Btu)	96.3	110.7	106.1	109.2	104.8
Change in Primary Energy Intensity (Annual Percent Change, 1999-2007)	—	-1.6	-2.0	-1.8	-2.2
Electricity Sales (Billion Kilowatthours)	3,294	3,926	3,703	3,878	3,691
Gross Domestic Product (Billion 1996 Dollars)	8,876	11,605	11,508	11,605	11,523
Natural Gas Wellhead Price (1999 Dollars per Thousand Cubic Feet)	2.08	2.86	3.35	2.58	3.03
Average Delivered Electricity Price (1999 Cents per Kilowatthour)	6.7	6.2	8.2	6.0	7.8
Emissions^a					
CO ₂ (Million Metric Tons Carbon Equivalent) ^b	1,511	1,750	1,563	1,712	1,536
SO ₂ (Million Tons)	13.5	10.1	3.5	10.1	3.6
NO _x (Million Tons)	5.4	4.3	1.7	4.2	1.8
Hg (Tons)	43.4	45.4	4.3	45.6	4.3
Allowance Prices					
CO ₂ (1999 Dollars per Metric Ton Carbon Equivalent)	0	0	85	0	78
SO ₂ (1999 Dollars per Ton)	0	177	5	174	85
NO _x (1999 Dollars per Ton) ^c	0	0	1,135	0	1,223
Hg (Million 1999 Dollars per Ton)	0	0	680	0	638

^aCO₂ emissions are from all energy sectors. Other emissions are from electricity generators, excluding cogenerators.

^bCO₂ emissions are from energy combustion only and do not include emissions from energy production or industrial processes.

^cRegional NO_x limits are included in the reference case, but the corresponding allowance costs are not included in the table because they are not comparable to a national NO_x limit.

Source: National Energy Modeling System, runs SCENABS.D080301A, SCENAEM.D081601A, SCENBBS.D080301A, and SCENBEM.D081701A.