Report #: SR-OIAF/2001-05
Released Date: October 2001
Next Release Date: One-Time

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

Table 10. Transportation Energy Consumption in the Reference and Advanced Technology Cases, 2010 and 2020

Projections	1999	Reference		Advanced Technology	
		Without Emissions Limits	With Emissions Limits	Without Emissions Limits	With Emissions Limits
		2010			
Energy Use by Mode (Quadrillion Btu)					
Light-Duty Vehicle	15.5	19.2	19.1	18.0	18.0
Heavy-Duty Vehicle	4.5	5.8	5.8	5.6	5.6
Air	3.5	4.6	4.5	4.5	4.6
Rail	0.6	0.7	0.6	0.6	0.6
Marine	1.3	1.5	1.5	1.5	1.5
Pipeline Fuel	0.7	0.9	1.0	0.9	1.0
Lubricants	0.2	0.3	0.3	0.3	0.3
Total	**26.3**	**32.8**	**32.7**	**31.3**	**31.3**
Energy Use by Fuel Type (Quadrillion Btu)					
Motor Gasoline	15.9	18.9	18.9	17.9	17.9
Distillate	5.1	7.0	6.9	6.6	6.5
Jet Fuel	3.5	4.5	4.5	4.5	4.5
Residual Fuel	0.7	0.9	0.9	0.9	0.9
Other Petroleum	0.3	0.4	0.4	0.4	0.4
Petroleum Subtotal	*25.5*	*31.6*	*31.5*	*30.2*	*30.1*
Methanol (M85)	0.00	0.00	0.01	0.00	0.01
Ethanol (E85)	0.01	0.03	0.03	0.05	0.05
Electricity	0.06	0.12	0.12	0.09	0.09
Compressed Natural Gas	0.02	0.09	0.09	0.13	0.13
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00
Pipeline Fuel	0.7	0.9	1.0	0.9	1.0
Total	**26.3**	**32.8**	**32.7**	**31.3**	**31.3**
CO_2 Emissions (Million Metric Tons Carbon Equivalent)	**498**	**626**	**623**	**597**	**596**
		2020			
Energy Use by Mode (Quadrillion Btu)					
Light-Duty Vehicle	15.5	21.7	21.7	18.8	18.8
Heavy-Duty Vehicle	4.5	6.7	6.7	6.2	6.2
Air	3.5	6.0	6.0	5.9	5.9
Rail	0.6	0.7	0.6	0.6	0.6
Marine	1.3	1.5	1.5	1.5	1.5
Pipeline Fuel	0.7	1.1	1.2	1.0	1.1
Lubricants	0.2	0.3	0.3	0.3	0.3
Total	**26.3**	**38.2**	**38.1**	**34.3**	**34.4**
Energy Use by Fuel Type (Quadrillion Btu)					
Motor Gasoline	15.9	21.3	21.2	18.4	18.4
Distillate	5.1	8.2	8.1	7.3	7.3
Jet Fuel	3.5	6.0	6.0	5.8	5.8
Residual Fuel	0.7	0.9	0.9	0.9	0.9
Other Petroleum	0.3	0.4	0.4	0.5	0.5
Petroleum Subtotal	*25.5*	*36.7*	*36.6*	*32.9*	*32.9*
Methanol (M85)	0.00	0.00	0.00	0.01	0.00
Ethanol (E85)	0.01	0.04	0.04	0.07	0.07
Electricity	0.06	0.17	0.17	0.12	0.12
Compressed Natural Gas	0.02	0.16	0.15	0.22	0.21
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00
Pipeline Fuel	0.7	1.1	1.2	1.0	1.1
Total	**26.3**	**38.2**	**38.1**	**34.3**	**34.4**
CO_2 Emissions (Million Metric Tons Carbon Equivalent)	**498**	**730**	**725**	**653**	**652**

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