

Appendix D
Updated Energy Calculations

Updated Energy Calculations - Proposed Amendment

	2016	2025	2035	2050
Gas, Daily	3,656.17	2,754.51	2,239.68	2,155.65
ratio	346.71	346.72	346.71	346.70
Gas, Annual	1,267.61	955.05	776.52	747.36
Diesel, Daily	411.28	422.88	429.36	441.58
ratio	322.20	323.14	322.68	322.20
Diesel, Annual	132.51	136.65	138.55	142.27
BTU, Gas	152.5	114.9	93.4	89.9
BTU, Diesel	18.2	18.8	19.0	19.5
Rail, MMT CO2e	0.11	0.17	0.19	0.2
Diesel, Rail	10.8	16.7	18.6	19.6

Category	2016 (Baseline)		2025		2035		2050	
	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU
Regional Growth and Land Use Change	--	123	--	123	--	126	--	129
Electricity (GWh)	18,842	64	17,475	60	18,078	62	18,191	62
Natural Gas (million therms)	585	58	629	63	648	65	671	67
Transportation Network Improvements and Programs	--	172	--	136	--	115	--	112
Vehicles, Gasoline (million gallons)	1,268	152	955	115	777	93	747	90
Vehicles, Diesel (million gallons)	133	18	137	19	139	19	142	20
Rail, Diesel (million gallons)	11	1	17	2	19	3	20	3
Total Construction (million gallons)	20	3	24	3	29	4	34	5
Total Energy Use	--	298	--	262	--	245	--	246
Per Capita Energy Use (metric million BTU/person)	91		75		68		66	
Total Energy Use, Percent Change 2016 to Plan Year	--		-12%		-18%		-17%	
Per Capita Energy Use, Percent Change 2016 to Plan Year	--		-17%		-25%		-27%	

Energy Calculations - Approved Plan

Category	2016 (Baseline)		2025		2035		2050	
	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU
Regional Growth and Land Use Change	--	123	--	122	--	126	--	129
Electricity (GWh)	18,842	64	17,475	60	18,078	62	18,191	62
Natural Gas (million therms)	585	59	629	63	648	65	671	67
Transportation Network Improvements and Programs	--	167	--	132	--	111	--	109
Vehicles, Gasoline (million gallons)	1,234	148	932	112	760	90	723	87
Vehicles, Diesel (million gallons)	122	17	130	18	132	18	143	20
Rail, Diesel (million gallons)	11	1	16	2	18	3	19	3
Total Construction (million gallons)	20	3	24	3	29	4	34	5
Total Energy Use	--	292	--	258	--	241	--	243
Per Capita Energy Use (metric million BTU/person)	89		74		67		65	
Total Energy Use, Percent Change 2016 to Plan Year	--		-12%		-17%		-17%	
Per Capita Energy Use, Percent Change 2016 to Plan Year	--		-16%		-25%		-27%	

Proposed Amendment Change from Approved Plan

Category	2016 (Baseline)		2025		2035		2050	
	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU	Energy Use	Trillion BTU
Regional Growth and Land Use Change	--	0	--	1	--	0	--	0
Electricity (GWh)	0	0	0	0	0	0	0	0
Natural Gas (million therms)	0	-1	0	0	0	0	0	0
Transportation Network Improvements and Programs	--	5	--	4	--	4	--	3
Vehicles, Gasoline (million gallons)	34	4	23	3	17	3	24	3
Vehicles, Diesel (million gallons)	11	1	7	1	7	1	-1	0
Rail, Diesel (million gallons)	0	0	1	0	1	0	1	0
Total Construction (million gallons)	0	0	0	0	0	0	0	0
Total Energy Use	--	6	--	4	--	4	--	3
Per Capita Energy Use (metric million BTU/person)	2		1		1		1	
Total Energy Use, Percent Change 2016 to Plan Year	--		0%		-1%		0%	
Per Capita Energy Use, Percent Change 2016 to Plan Year	--		-1%		0%		0%	