

APPENDICES

APPENDIX A: Regional Greenhouse Gas Inventory and Reduction Projections

TABLE 2: Regional Greenhouse Gas Inventory					
Sector/Activity	Fuel or Source	2021 Usage/Activity	Units	2021 Emissions (MT CO ₂ e)	Percent of Total
Residential Energy	Electricity	13,131,506,026	kWh	4,026,759	12.51%
	Wood	1,926,115	MMBtu	18,764	0.06%
	Distillate Fuel Oil No. 2	6,623,955	MMBtu	493,177	1.53%
	Propane	3,194,532	MMBtu	198,249	0.62%
	Kerosene	93,957	MMBtu	7,113	0.02%
	Natural Gas	37,488,768	MMBtu	1,993,776	6.19%
	Residential Energy Total				6,737,838
Commercial Energy	Electricity	13,333,284,169	kWh	4,088,634	12.70%
	Distillate Fuel Oil No. 2	3,549,084	MMBtu	264,242	0.82%
	Propane	5,978,384	MMBtu	371,012	1.15%
	Natural Gas	30,533,424	MMBtu	1,623,868	5.04%
	Kerosene	48,618	MMBtu	3,681	0.01%
	Other Commercial Fuels	-	-	4,940	0.02%
	Commercial Energy Total				6,356,377
Industrial Energy	Electricity	1,862,600,409	kWh	571,164	1.77%
	Natural Gas	26,745,309	MMBtu	469,167	1.46%
	LPG	16,587	MMBtu	1,023	0.00%
	Distillate Fuel Oil No. 2	296,934	Gallons	17,772	0.06%
	Other Industrial Fuels	-	-	81,025	0.25%
	Industrial Energy Total				1,140,151
On Road Transportation	Gasoline	24,002,996,939	Vehicle Miles Traveled (VMT)	10,455,598	32.47%
	Diesel	2,197,349,539	Vehicle Miles Traveled (VMT)	3,123,678	9.70%
	CNG	23,351,041	Vehicle Miles Traveled (VMT)	2,364	0.01%
	Ethanol	42,270,949	Vehicle Miles Traveled (VMT)	3,649	0.01%

	Electricity	164,673,988	Vehicle Miles Traveled (VMT)	81,049	0.25%
Rail Transportation	Diesel	651,438	MMBTU	48,603	0.15%
Waterborne Transportation	Gasoline	538,605	MMBTU	38,781	0.12%
	Diesel	141,989	MMBTU	10,508	0.03%
Off Road Transportation & Mobile Sources	Gasoline	4,601,077	MMBTU	330,478	1.03%
	Diesel	6,125,066	MMBTU	453,254	1.41%
	CNG	164,348	MMBTU	10,364	0.03%
	LPG	1,504,860	MMBTU	92,677	0.29%
	Transportation & Mobile Sources Total			14,651,004	45.50%
Solid Waste	Waste Generation	1,172,453	Tons	484,613	1.51%
	Landfill Gas Flaring	446,259	MMBTU	5,494	0.02%
	Solid Waste Incineration	6,619,110	MMBTU	229,478	0.71%
	Closed Landfills	-	-	99,087	0.31%
	Solid Waste Total (does not include Closed Landfills)			719,585	2.23%
Water and Wastewater	Wastewater Treatment	-	-	325,157	1.01%
	Water and Wastewater Total			325,157	1.01%
Process & Fugitive Emissions	Fugitive Emissions from Natural Gas Distribution	85,056,325	MMBTU	157,051	0.49%
	Oil and Gas Production and Processing	-	-	3,290	0.01%
	Industrial Process & Product Use	-	-	1,876,474	5.83%
	Process & Fugitive Emissions Total			2,036,816	6.33%
Agriculture, Forestry, and other Land Uses (AFOLU)	Livestock	-	-	149,135	0.46%
	Crops	-	-	82,009	0.25%
	Land/Forestry	-	-	-1,452,350	-
	AFOLU Total (does not include Land/Forestry)			231,144	0.72%
Total 2021 Regional Emissions				32,198,072	

	TABLE 3: BAU Emissions, Net Reductions per Action, & Remaining Emissions after Implementation (MT CO2e)		
	2025	2030	2050
Business As Usual Emissions	28,128,384	25,503,512	23,719,593
Action	Net Reductions		
VMT Reduction - 25% by 2050 - Gasoline	105,691	579,093	1,745,018
VMT Reduction - 25% by 2050 - Diesel	33,955	203,733	882,845
Advanced Clean Cars II	199,881	1,170,684	4,662,100
Advanced Clean Trucks	93,525	635,066	2,354,686
Clean Power Standard	0	0	3,228,167
Residential Energy Codes and Standards	23,749	142,494	474,983
Commercial Energy Codes and Standards	19,141	114,849	382,828
Residential Building Energy Performance Standards	92,472	618,272	2,308,824
Commercial Building Energy Performance Standards	65,683	450,911	1,725,072
Waste diversion	35,705	214,229	214,228
Remaining Emissions after Implementation			
Remaining Emissions after Implementation	27,458,582	21,374,181	5,740,842
Percent Change (%) from 2021 Baseline	-14.72%	-33.62%	-82.17%

	TABLE 4: GHG Reduction Projections (MT CO ₂ e) and Percent Change from Baseline			
	2021 Baseline	2025	2030	2050
Industrial Energy	1,140,151	805,315 (-29.37%)	631,097 (-44.65%)	469,160 (-58.85%)
Residential Energy	6,737,838	4,886,770 (-27.47%)	3,391,856 (-49.66%)	333,476 (-95.05%)
Commercial Energy	6,356,375	4,594,802 (-27.71%)	3,232,077 (-49.15%)	477,562 (-92.49%)
Transportation & Mobile Sources	14,651,004	13,854,053 (-5.44%)	10,953,762 (-25.24%)	1,205,312 (-91.77%)
Water & Wastewater	325,157	336,154 (3.38%)	343,262 (5.57%)	367,597 (13.05%)
AFOLU	231,144	231,144 (0%)	231,144 (0.00%)	231,144 (0.00%)
Process & Fugitive Emissions	2,036,816	2042127 (0.26%)	2,045,560 (0.43%)	2,057,314 (1.01%)
Solid Waste	719,585	708217 (-1.58%)	545,423 (-24.20%)	599,277 (-16.72%)