

Appendix C

Greenhouse Gas Inventory



Town of Truckee Climate Action Plan Greenhouse Gas Emissions Summary

GHG Inventory and Forecast Summary

Inventory and Business-as-Usual (BAU) Forecast GHG Emissions (MTCO ₂ e)						
Sector	2008	2016	2030	2040	2045	2050
Building Energy	151,870	158,014	185,689	203,295	212,715	222,571
<i>Residential Building Energy</i>	100,000	105,579	124,980	136,831	143,171	149,805
<i>Non-Residential Building Energy</i>	51,870	52,434	60,708	66,465	69,544	72,767
Community Transportation	64,047	57,999	64,571	70,019	72,734	75,337
<i>On-Road Transportation</i>	55,653	49,839	55,326	60,026	62,655	65,167
<i>Off-Road Equipment</i>	8,393	8,160	9,245	9,992	10,079	10,169
Solid Waste	4,256	3,804	3,887	3,923	3,958	3,994
Water and Wastewater	10,175	8,517	9,568	9,667	9,253	9,308
TOTAL	230,348	228,334	263,715	286,903	298,660	311,210

Inventory and Legislative-Adjusted Business-as-Usual (ABAU) Forecast GHG Emissions (MTCO₂e)

Sector	2008	2016	2030	2040	2045	2050
Building Energy	151,870	89,894	93,291	84,887	69,992	71,760
<i>Residential Building Energy</i>	100,000	64,679	66,700	62,099	53,389	54,739
<i>Non-Residential Building Energy</i>	51,870	25,216	26,591	22,789	16,604	17,021
Community Transportation	64,047	56,428	54,474	57,257	58,085	59,733
<i>On-Road Transportation</i>	55,653	48,268	45,229	47,264	48,006	49,564
<i>Off-Road Equipment</i>	8,393	8,160	9,245	9,992	10,079	10,169
Solid Waste	4,256	3,804	3,887	3,922	3,958	3,994
Water and Wastewater	10,175	3,142	3,386	2,573	1,187	1,242
TOTAL	230,348	153,269	155,038	148,640	133,222	136,729

GHG Emissions Reduction Measure Summary

Sector	Measure #	Title	Annual GHG Emissions Reduction (MTCO ₂ e)			
			2030	2040	2045	2050
Transportation and Land Use	GOAL CAP-1	Reduction in Vehicle Miles Traveled	1,087	1,372	1,678	2,064
	GOAL CAP-2	Bicycle and Pedestrian Trips	869	1,472	1,746	2,050
	GOAL CAP-3	Transit System	800	1,564	1,530	1,569
	GOAL CAP-4	Low- and Zero-Emissions Vehicles	317	668	1,018	1,325
	GOAL CAP-5	Land Use Patterns	240	219	209	209
	GOAL CAP-6	Open Space Carbon Sequestration	2,775	5,550	8,325	11,100
Building Energy	GOAL CAP-7a	Energy Efficiency in Existing Development (CAP-7.A Building Energy Retrofit Program)	15,864	36,997	29,790	29,790
	GOAL CAP-7b	Energy Efficiency in Existing Development (CAP-7.B Renewable Energy Sources)	11,763	14,875	29,471	29,471
	GOAL CAP-7c	Energy Efficiency in Existing Development (CAP-7.G Water Conservation)	12	7	0	0
	GOAL CAP-8	Energy Efficiency in New Development	465	5,740	6,649	8,416
Solid Waste	GOAL CAP-9	Organic Waste	1,166	2,353	2,969	2,996
Total GHG Reductions from CAP (MTCO₂e)			35,359	70,817	83,384	88,990

Inventory/Forecasts, Reduction Targets and Gap, and CAP Reductions Summary

	2008	2016	2030	2040	2045	2050
Inventory and ABAU Forecast Emissions	230,348	153,269	155,038	148,640	133,222	136,729
Target Percent Reduction below 2008 Levels	--	--	40%	80%	100%	100%
Target Annual Mass Emissions Level			138,209	46,070	-	-
Reduction Needed to Achieve Targets			16,829	102,570	133,222	136,729
Total GHG Reductions from CAP			35,359	70,817	83,384	88,990
Remaining Gap to Achieve Target¹			(18,529)	31,754	49,838	47,739
% Reduction achieved			210%	69%	63%	65%

¹ Parentheses indicates target has been achieved with a surplus of reductions.