

Appendix B

CalEEMod Outputs

Santa Maria GPU (Net New) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santa Maria GPU (Net New)
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	Santa Maria, CA, USA
County	Santa Barbara
City	Santa Maria
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3382
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	16,140	Dwelling Unit	425	15,494,400	0.00	0.00	58,265	—

General Office Building	64,154	1000sqft	1,473	64,154,000	0.00	0.00	—	—
Industrial Park	305	1000sqft	7.00	304,920	0.00	0.00	—	—
City Park	33.0	Acre	33.0	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,601	2,518	611	5,409	8.21	45.0	614	659	43.6	155	199	66,208	1,933,889	2,000,098	4,329	87.3	540	2,134,870
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,017	1,977	587	1,609	7.91	39.6	614	653	39.5	155	195	66,208	1,910,974	1,977,183	4,328	87.8	351	2,111,909
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2,305	2,244	602	3,450	8.02	42.3	610	652	41.5	154	196	66,208	1,918,389	1,984,598	4,328	87.9	430	2,119,420
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	421	410	110	630	1.46	7.72	111	119	7.58	28.2	35.8	10,962	317,611	328,573	717	14.5	71.2	350,894

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	55.3	42.5	85.7	1,314	5.00	1.66	614	615	1.56	155	157	—	508,907	508,907	9.31	13.9	193	513,467
Area	2,491	2,448	32.0	3,724	0.21	5.39	—	5.39	4.07	—	4.07	0.00	13,976	13,976	0.59	0.12	—	14,027
Energy	54.9	27.5	493	372	3.00	38.0	—	38.0	38.0	—	38.0	—	1,374,601	1,374,601	179	16.4	—	1,383,953
Water	—	—	—	—	—	—	—	—	—	—	—	25,729	36,405	62,134	94.3	56.9	—	81,455
Waste	—	—	—	—	—	—	—	—	—	—	—	40,479	0.00	40,479	4,046	0.00	—	141,622
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	346	346
Total	2,601	2,518	611	5,409	8.21	45.0	614	659	43.6	155	199	66,208	1,933,889	2,000,098	4,329	87.3	540	2,134,870
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	54.3	41.8	93.8	1,237	4.91	1.66	614	615	1.56	155	157	—	499,969	499,969	9.08	14.5	5.01	504,532
Area	1,908	1,908	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	54.9	27.5	493	372	3.00	38.0	—	38.0	38.0	—	38.0	—	1,374,601	1,374,601	179	16.4	—	1,383,953
Water	—	—	—	—	—	—	—	—	—	—	—	25,729	36,405	62,134	94.3	56.9	—	81,455
Waste	—	—	—	—	—	—	—	—	—	—	—	40,479	0.00	40,479	4,046	0.00	—	141,622
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	346	346
Total	2,017	1,977	587	1,609	7.91	39.6	614	653	39.5	155	195	66,208	1,910,974	1,977,183	4,328	87.8	351	2,111,909
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	54.6	42.0	93.7	1,242	4.92	1.66	610	611	1.56	154	156	—	500,491	500,491	9.16	14.5	83.5	505,126
Area	2,196	2,174	15.8	1,836	0.10	2.66	—	2.66	2.01	—	2.01	0.00	6,893	6,893	0.29	0.06	—	6,917

Energy	54.9	27.5	493	372	3.00	38.0	—	38.0	38.0	—	38.0	—	1,374,60	1,374,60	179	16.4	—	1,383,95
Water	—	—	—	—	—	—	—	—	—	—	—	25,729	36,405	62,134	94.3	56.9	—	81,455
Waste	—	—	—	—	—	—	—	—	—	—	—	40,479	0.00	40,479	4,046	0.00	—	141,622
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	346	346
Total	2,305	2,244	602	3,450	8.02	42.3	610	652	41.5	154	196	66,208	1,918,389	1,984,598	4,328	87.9	430	2,119,420
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.97	7.66	17.1	227	0.90	0.30	111	112	0.28	28.2	28.5	—	82,862	82,862	1.52	2.40	13.8	83,629
Area	401	397	2.88	335	0.02	0.48	—	0.48	0.37	—	0.37	0.00	1,141	1,141	0.05	0.01	—	1,145
Energy	10.0	5.01	90.0	67.9	0.55	6.93	—	6.93	6.93	—	6.93	—	227,581	227,581	29.6	2.71	—	229,129
Water	—	—	—	—	—	—	—	—	—	—	—	4,260	6,027	10,287	15.6	9.42	—	13,486
Waste	—	—	—	—	—	—	—	—	—	—	—	6,702	0.00	6,702	670	0.00	—	23,447
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57.3	57.3
Total	421	410	110	630	1.46	7.72	111	119	7.58	28.2	35.8	10,962	317,611	328,573	717	14.5	71.2	350,894

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	26,770	26,770	4.33	0.52	—	27,035
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	748,300	748,300	121	14.7	—	755,700
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	3,557	3,557	0.58	0.07	—	3,592
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	778,627	778,627	126	15.3	—	786,326
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	26,770	26,770	4.33	0.52	—	27,035
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	748,300	748,300	121	14.7	—	755,700
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	3,557	3,557	0.58	0.07	—	3,592
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	778,627	778,627	126	15.3	—	786,326
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	4,432	4,432	0.72	0.09	—	4,476
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	123,890	123,890	20.0	2.43	—	125,115
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	589	589	0.10	0.01	—	595

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	128,911	128,911	20.9	2.53	—	130,185

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	11.9	5.96	102	43.4	0.65	8.24	—	8.24	8.24	—	8.24	—	129,348	129,348	11.4	0.24	—	129,707
General Office Building	42.8	21.4	389	327	2.34	29.6	—	29.6	29.6	—	29.6	—	464,418	464,418	41.1	0.87	—	465,706
Industrial Park	0.20	0.10	1.85	1.55	0.01	0.14	—	0.14	0.14	—	0.14	—	2,207	2,207	0.20	< 0.005	—	2,213
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	54.9	27.5	493	372	3.00	38.0	—	38.0	38.0	—	38.0	—	595,973	595,973	52.7	1.12	—	597,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	11.9	5.96	102	43.4	0.65	8.24	—	8.24	8.24	—	8.24	—	129,348	129,348	11.4	0.24	—	129,707
General Office Building	42.8	21.4	389	327	2.34	29.6	—	29.6	29.6	—	29.6	—	464,418	464,418	41.1	0.87	—	465,706
Industrial Park	0.20	0.10	1.85	1.55	0.01	0.14	—	0.14	0.14	—	0.14	—	2,207	2,207	0.20	< 0.005	—	2,213

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	54.9	27.5	493	372	3.00	38.0	—	38.0	38.0	—	38.0	—	595,973	595,973	52.7	1.12	—	597,626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.18	1.09	18.6	7.91	0.12	1.50	—	1.50	1.50	—	1.50	—	21,415	21,415	1.90	0.04	—	21,474
General Office Building	7.81	3.91	71.0	59.7	0.43	5.40	—	5.40	5.40	—	5.40	—	76,890	76,890	6.80	0.14	—	77,103
Industrial Park	0.04	0.02	0.34	0.28	< 0.005	0.03	—	0.03	0.03	—	0.03	—	365	365	0.03	< 0.005	—	366
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	10.0	5.01	90.0	67.9	0.55	6.93	—	6.93	6.93	—	6.93	—	98,670	98,670	8.73	0.19	—	98,944

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1,711	1,711	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	583	540	32.0	3,724	0.21	5.39	—	5.39	4.07	—	4.07	—	13,976	13,976	0.59	0.12	—	14,027
Total	2,491	2,448	32.0	3,724	0.21	5.39	—	5.39	4.07	—	4.07	0.00	13,976	13,976	0.59	0.12	—	14,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1,711	1,711	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1,908	1,908	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	312	312	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	35.9	35.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	52.5	48.6	2.88	335	0.02	0.48	—	0.48	0.37	—	0.37	—	1,141	1,141	0.05	0.01	—	1,145
Total	401	397	2.88	335	0.02	0.48	—	0.48	0.37	—	0.37	0.00	1,141	1,141	0.05	0.01	—	1,145

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,212	1,715	2,926	4.44	2.68	—	3,836
General Office Building	—	—	—	—	—	—	—	—	—	—	—	24,367	34,478	58,844	89.3	53.9	—	77,141
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	213	364	0.55	0.33	—	477
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25,729	36,405	62,134	94.3	56.9	—	81,455
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,212	1,715	2,926	4.44	2.68	—	3,836
General Office Building	—	—	—	—	—	—	—	—	—	—	—	24,367	34,478	58,844	89.3	53.9	—	77,141
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	213	364	0.55	0.33	—	477
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	25,729	36,405	62,134	94.3	56.9	—	81,455
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	201	284	484	0.74	0.44	—	635
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4,034	5,708	9,742	14.8	8.93	—	12,772
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	24.9	35.3	60.2	0.09	0.06	—	79.0
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4,260	6,027	10,287	15.6	9.42	—	13,486

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8,119	0.00	8,119	811	0.00	—	28,405
General Office Building	—	—	—	—	—	—	—	—	—	—	—	32,155	0.00	32,155	3,214	0.00	—	112,499
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713
City Park	—	—	—	—	—	—	—	—	—	—	—	1.53	0.00	1.53	0.15	0.00	—	5.35
Total	—	—	—	—	—	—	—	—	—	—	—	40,479	0.00	40,479	4,046	0.00	—	141,622

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8,119	0.00	8,119	811	0.00	—	28,405
General Office Building	—	—	—	—	—	—	—	—	—	—	—	32,155	0.00	32,155	3,214	0.00	—	112,499
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713
City Park	—	—	—	—	—	—	—	—	—	—	—	1.53	0.00	1.53	0.15	0.00	—	5.35
Total	—	—	—	—	—	—	—	—	—	—	—	40,479	0.00	40,479	4,046	0.00	—	141,622
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1,344	0.00	1,344	134	0.00	—	4,703
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5,324	0.00	5,324	532	0.00	—	18,625
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	33.7	0.00	33.7	3.37	0.00	—	118
City Park	—	—	—	—	—	—	—	—	—	—	—	0.25	0.00	0.25	0.03	0.00	—	0.89
Total	—	—	—	—	—	—	—	—	—	—	—	6,702	0.00	6,702	670	0.00	—	23,447

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	156	156
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	79.4	79.4
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	346	346
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	111	111
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	156	156
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	79.4	79.4
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	346	346
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	18.4	18.4
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25.8	25.8

Industria Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13.1	13.1
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57.3	57.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
-----------------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
---------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	873,403	873,403	873,403	318,792,051

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
31376160	10,458,720	96,688,380	32,229,460	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	47,901,841	204	0.0330	0.0040	403,601,456
General Office Building	1,338,982,138	204	0.0330	0.0040	1,449,107,575
Industrial Park	6,364,099	204	0.0330	0.0040	6,887,519
City Park	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	567,047,831	0.00
General Office Building	11,402,330,869	0.00
Industrial Park	70,512,750	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	15,065	—
General Office Building	59,663	—
Industrial Park	378	—
City Park	2.84	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.13	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	47.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	10.0
AQ-DPM	63.0
Drinking Water	11.2
Lead Risk Housing	99.5
Pesticides	94.3
Toxic Releases	11.0
Traffic	35.7
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	58.3
Impaired Water Bodies	77.3
Solid Waste	86.5
Sensitive Population	—
Asthma	86.7
Cardio-vascular	52.0
Low Birth Weights	58.8
Socioeconomic Factor Indicators	—
Education	74.8
Housing	73.7
Linguistic	82.3
Poverty	68.8
Unemployment	11.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.7842936
Employed	26.07468241
Median HI	19.58167586
Education	—
Bachelor's or higher	21.46798409
High school enrollment	100
Preschool enrollment	24.25253433
Transportation	—
Auto Access	17.51571924
Active commuting	31.00218144
Social	—
2-parent households	26.42114718
Voting	71.23059156
Neighborhood	—
Alcohol availability	39.92044142
Park access	81.35506224
Retail density	93.58398563
Supermarket access	59.20698062
Tree canopy	1.73232388
Housing	—
Homeownership	21.2498396
Housing habitability	23.77774926
Low-inc homeowner severe housing cost burden	59.43795714
Low-inc renter severe housing cost burden	18.86308225

Uncrowded housing	12.81919672
Health Outcomes	—
Insured adults	9.444373155
Arthritis	44.8
Asthma ER Admissions	32.8
High Blood Pressure	74.3
Cancer (excluding skin)	57.8
Asthma	16.4
Coronary Heart Disease	34.0
Chronic Obstructive Pulmonary Disease	16.6
Diagnosed Diabetes	47.0
Life Expectancy at Birth	17.7
Cognitively Disabled	56.3
Physically Disabled	50.9
Heart Attack ER Admissions	66.1
Mental Health Not Good	18.5
Chronic Kidney Disease	45.1
Obesity	26.8
Pedestrian Injuries	59.4
Physical Health Not Good	24.5
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	40.3
Current Smoker	18.8
No Leisure Time for Physical Activity	31.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	1.1
Elderly	85.6
English Speaking	30.5
Foreign-born	45.8
Outdoor Workers	1.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	66.6
Traffic Density	39.0
Traffic Access	0.0
Other Indices	—
Hardship	89.0
Other Decision Support	—
2016 Voting	53.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	67.0
Healthy Places Index Score for Project Location (b)	23.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
 b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Population based on a pph of 3.61.
Operations: Hearths	No fireplaces or wood stoves
Operations: Architectural Coatings	SBCAPCD Rule 323.1 nonflat coating

Santa Maria GPU (Net Reduction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Santa Maria GPU (Net Reduction)
Operational Year	2045
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	10.0
Location	Santa Maria, CA, USA
County	Santa Barbara
City	Santa Maria
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3382
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	20,170	1000sqft	463	20,170,000	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	656	637	135	1,064	1.11	11.0	39.2	50.1	10.6	9.91	20.5	17,770	428,192	445,962	1,090	22.8	61.4	480,059
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	500	492	128	182	1.05	9.41	39.2	48.6	9.40	9.91	19.3	17,770	424,014	441,785	1,090	22.8	49.4	475,869
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	577	563	132	615	1.07	10.2	38.9	49.1	9.98	9.85	19.8	17,770	425,827	443,597	1,090	22.8	54.4	477,692
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	105	103	24.1	112	0.20	1.86	7.10	8.96	1.82	1.80	3.62	2,942	70,500	73,443	180	3.77	9.00	79,087

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.53	2.71	5.47	83.8	0.32	0.11	39.2	39.3	0.10	9.91	10.0	—	32,467	32,467	0.59	0.89	12.3	32,758

Area	639	627	7.38	877	0.05	1.56	—	1.56	1.18	—	1.18	—	3,607	3,607	0.15	0.03	—	3,620
Energy	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	381,278	381,278	51.0	4.89	—	384,009
Water	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Waste	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Total	656	637	135	1,064	1.11	11.0	39.2	50.1	10.6	9.91	20.5	17,770	428,192	445,962	1,090	22.8	61.4	480,059
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.46	2.66	5.98	78.9	0.31	0.11	39.2	39.3	0.10	9.91	10.0	—	31,896	31,896	0.58	0.93	0.32	32,188
Area	483	483	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	381,278	381,278	51.0	4.89	—	384,009
Water	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Waste	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Total	500	492	128	182	1.05	9.41	39.2	48.6	9.40	9.91	19.3	17,770	424,014	441,785	1,090	22.8	49.4	475,869
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.48	2.68	5.98	79.2	0.31	0.11	38.9	39.0	0.10	9.85	9.95	—	31,930	31,930	0.58	0.93	5.33	32,226
Area	560	554	3.64	433	0.03	0.77	—	0.77	0.58	—	0.58	—	1,779	1,779	0.07	0.02	—	1,785
Energy	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	381,278	381,278	51.0	4.89	—	384,009
Water	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Waste	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Total	577	563	132	615	1.07	10.2	38.9	49.1	9.98	9.85	19.8	17,770	425,827	443,597	1,090	22.8	54.4	477,692
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.64	0.49	1.09	14.5	0.06	0.02	7.10	7.12	0.02	1.80	1.82	—	5,286	5,286	0.10	0.15	0.88	5,335
Area	102	101	0.66	79.0	< 0.005	0.14	—	0.14	0.11	—	0.11	—	295	295	0.01	< 0.005	—	296
Energy	2.46	1.23	22.3	18.8	0.13	1.70	—	1.70	1.70	—	1.70	—	63,125	63,125	8.44	0.81	—	63,577

Water	—	—	—	—	—	—	—	—	—	—	—	1,268	1,795	3,063	4.65	2.81	—	4,015
Waste	—	—	—	—	—	—	—	—	—	—	—	1,674	0.00	1,674	167	0.00	—	5,856
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.12	8.12
Total	105	103	24.1	112	0.20	1.86	7.10	8.96	1.82	1.80	3.62	2,942	70,500	73,443	180	3.77	9.00	79,087

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	235,265	235,265	38.1	4.61	—	237,592
Total	—	—	—	—	—	—	—	—	—	—	—	—	235,265	235,265	38.1	4.61	—	237,592
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	235,265	235,265	38.1	4.61	—	237,592
Total	—	—	—	—	—	—	—	—	—	—	—	—	235,265	235,265	38.1	4.61	—	237,592
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	38,951	38,951	6.30	0.76	—	39,336
Total	—	—	—	—	—	—	—	—	—	—	—	—	38,951	38,951	6.30	0.76	—	39,336

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	146,013	146,013	12.9	0.27	—	146,418
Total	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	146,013	146,013	12.9	0.27	—	146,418
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	146,013	146,013	12.9	0.27	—	146,418
Total	13.5	6.73	122	103	0.73	9.30	—	9.30	9.30	—	9.30	—	146,013	146,013	12.9	0.27	—	146,418
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.46	1.23	22.3	18.8	0.13	1.70	—	1.70	1.70	—	1.70	—	24,174	24,174	2.14	0.05	—	24,241
Total	2.46	1.23	22.3	18.8	0.13	1.70	—	1.70	1.70	—	1.70	—	24,174	24,174	2.14	0.05	—	24,241

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	432	432	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	51.2	51.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	156	144	7.38	877	0.05	1.56	—	1.56	1.18	—	1.18	—	3,607	3,607	0.15	0.03	—	3,620
Total	639	627	7.38	877	0.05	1.56	—	1.56	1.18	—	1.18	—	3,607	3,607	0.15	0.03	—	3,620
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	432	432	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	51.2	51.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	483	483	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	78.8	78.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	9.35	9.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	14.1	13.0	0.66	79.0	< 0.005	0.14	—	0.14	0.11	—	0.11	—	295	295	0.01	< 0.005	—	296
Total	102	101	0.66	79.0	< 0.005	0.14	—	0.14	0.11	—	0.11	—	295	295	0.01	< 0.005	—	296

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Total	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Total	—	—	—	—	—	—	—	—	—	—	—	7,661	10,840	18,501	28.1	16.9	—	24,253
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,268	1,795	3,063	4.65	2.81	—	4,015
Total	—	—	—	—	—	—	—	—	—	—	—	1,268	1,795	3,063	4.65	2.81	—	4,015

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Total	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Total	—	—	—	—	—	—	—	—	—	—	—	10,109	0.00	10,109	1,010	0.00	—	35,370
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1,674	0.00	1,674	167	0.00	—	5,856
Total	—	—	—	—	—	—	—	—	—	—	—	1,674	0.00	1,674	167	0.00	—	5,856

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	49.1	49.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.12	8.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8.12	8.12

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	55,720	55,720	55,720	20,337,945

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	30,255,000	10,085,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	420,975,617	204	0.0330	0.0040	455,599,024

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	3,584,889,697	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	18,758	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.13	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	47.0	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	10.0
AQ-DPM	63.0
Drinking Water	11.2
Lead Risk Housing	99.5
Pesticides	94.3
Toxic Releases	11.0
Traffic	35.7
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00
Haz Waste Facilities/Generators	58.3
Impaired Water Bodies	77.3
Solid Waste	86.5
Sensitive Population	—
Asthma	86.7
Cardio-vascular	52.0
Low Birth Weights	58.8

Socioeconomic Factor Indicators	—
Education	74.8
Housing	73.7
Linguistic	82.3
Poverty	68.8
Unemployment	11.9

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	16.7842936
Employed	26.07468241
Median HI	19.58167586
Education	—
Bachelor's or higher	21.46798409
High school enrollment	100
Preschool enrollment	24.25253433
Transportation	—
Auto Access	17.51571924
Active commuting	31.00218144
Social	—
2-parent households	26.42114718
Voting	71.23059156
Neighborhood	—
Alcohol availability	39.92044142
Park access	81.35506224
Retail density	93.58398563

Supermarket access	59.20698062
Tree canopy	1.73232388
Housing	—
Homeownership	21.2498396
Housing habitability	23.77774926
Low-inc homeowner severe housing cost burden	59.43795714
Low-inc renter severe housing cost burden	18.86308225
Uncrowded housing	12.81919672
Health Outcomes	—
Insured adults	9.444373155
Arthritis	44.8
Asthma ER Admissions	32.8
High Blood Pressure	74.3
Cancer (excluding skin)	57.8
Asthma	16.4
Coronary Heart Disease	34.0
Chronic Obstructive Pulmonary Disease	16.6
Diagnosed Diabetes	47.0
Life Expectancy at Birth	17.7
Cognitively Disabled	56.3
Physically Disabled	50.9
Heart Attack ER Admissions	66.1
Mental Health Not Good	18.5
Chronic Kidney Disease	45.1
Obesity	26.8
Pedestrian Injuries	59.4
Physical Health Not Good	24.5
Stroke	34.3

Health Risk Behaviors	—
Binge Drinking	40.3
Current Smoker	18.8
No Leisure Time for Physical Activity	31.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	1.1
Elderly	85.6
English Speaking	30.5
Foreign-born	45.8
Outdoor Workers	1.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	66.6
Traffic Density	39.0
Traffic Access	0.0
Other Indices	—
Hardship	89.0
Other Decision Support	—
2016 Voting	53.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	67.0
Healthy Places Index Score for Project Location (b)	23.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Architectural Coatings	SBCAPCD RULE 323.1 nonflat coating