

Air Quality and Greenhouse Gas Emissions Modeling Results

# Carlsbad GPU EIR v4 Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Carlsbad GPU EIR v4
Operational Year	2024
Lead Agency	_
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	21.8
Location	33.1599237850095, -117.34862128462754
County	San Diego
City	Carlsbad
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6228
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.14

## 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	3,295	Dwelling Unit	86.7	3,163,200	0.00	0.00	8,260	_

### 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	5,177	5,156	164	7,014	13.0	859	139	998	855	35.2	891	92,935	230,103	323,038	210	12.2	688	332,621
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	5,159	5,139	167	6,745	12.9	859	139	998	855	35.2	891	92,935	221,900	314,835	210	12.5	39.9	323,852
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1,193	1,239	91.3	2,022	4.14	194	139	333	193	35.2	229	21,985	193,735	215,720	144	7.40	310	221,845
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	218	226	16.7	369	0.76	35.5	25.4	60.8	35.3	6.43	41.7	3,640	32,075	35,715	23.9	1.23	51.3	36,729

### 2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer																		
(Max)																		

Mobile	32.0	24.6	57.3	601	1.63	1.25	139	140	1.17	35.2	36.4	_	166,278	166,278	4.89	4.99	665	168,552
Area	5,144	5,131	100	6,411	11.3	858	_	858	854	_	854	91,508	38,658	130,166	84.5	6.57	_	134,235
Energy	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	24,001	24,001	1.67	0.14	_	24,083
Water	_	_	_	_	_	_	_	-	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Waste	_	_	_	_	_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Total	5,177	5,156	164	7,014	13.0	859	139	998	855	35.2	891	92,935	230,103	323,038	210	12.2	688	332,621
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	32.0	24.8	62.8	518	1.56	1.25	139	140	1.17	35.2	36.4	_	158,575	158,575	4.83	5.27	17.3	160,284
Area	5,126	5,114	98.5	6,225	11.3	858	_	858	854	_	854	91,508	38,159	129,666	84.4	6.57	_	133,734
Energy	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	24,001	24,001	1.67	0.14	_	24,083
Water	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Waste	_	_	_	_	_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Total	5,159	5,139	167	6,745	12.9	859	139	998	855	35.2	891	92,935	221,900	314,835	210	12.5	39.9	323,852
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	31.9	24.7	62.3	529	1.57	1.25	139	140	1.17	35.2	36.4	_	159,750	159,750	4.84	5.24	287	161,720
Area	1,161	1,214	23.0	1,490	2.54	193	_	193	192	_	192	20,558	8,819	29,377	19.0	1.48	_	30,292
Energy	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	24,001	24,001	1.67	0.14	_	24,083
Water	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Waste	_	_	_		_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Total	1,193	1,239	91.3	2,022	4.14	194	139	333	193	35.2	229	21,985	193,735	215,720	144	7.40	310	221,845
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	5.83	4.51	11.4	96.5	0.29	0.23	25.4	25.6	0.21	6.43	6.65	_	26,448	26,448	0.80	0.87	47.6	26,775
Area	212	222	4.20	272	0.46	35.2	_	35.2	35.0	_	35.0	3,404	1,460	4,864	3.14	0.24	_	5,015

Energy	0.13	0.06	1.07	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	3,974	3,974	0.28	0.02	_	3,987
Water	_	_	_	_	_	_	<u> </u>	_	_	_	_	41.0	193	234	0.15	0.09	_	265
Waste	_	_	_	_	_	_	_	_	_	_	_	195	0.00	195	19.5	0.00	_	683
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.75	3.75
Total	218	226	16.7	369	0.76	35.5	25.4	60.8	35.3	6.43	41.7	3,640	32,075	35,715	23.9	1.23	51.3	36,729

## 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

Land Use						PM10E				PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	16,526	16,526	1.01	0.12	_	16,588
Total	_	_	_	_	_	_	_	_	_	_	_	_	16,526	16,526	1.01	0.12	_	16,588
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	16,526	16,526	1.01	0.12	_	16,588

Total	_	_	_	_	_	_	_	_	_	_	_	_	16,526	16,526	1.01	0.12	_	16,588
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	2,736	2,736	0.17	0.02	_	2,746
Total	_	_	_	_	_	_	_	_	_	_	_	_	2,736	2,736	0.17	0.02	_	2,746

### $4.2.3. \ Natural \ Gas \ Emissions \ By \ Land \ Use$ - Unmitigated

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

		( (	,	J, J		,	(			. ,	J			_				_
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	7,475	7,475	0.66	0.01	_	7,496
Total	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	7,475	7,475	0.66	0.01	_	7,496
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	7,475	7,475	0.66	0.01	_	7,496
Total	0.69	0.34	5.89	2.51	0.04	0.48	_	0.48	0.48	_	0.48	_	7,475	7,475	0.66	0.01	_	7,496
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_		<u> </u>
Apartme nts Mid Rise	0.13	0.06	1.07	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	1,238	1,238	0.11	< 0.005	_	1,241
Total	0.13	0.06	1.07	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	1,238	1,238	0.11	< 0.005	_	1,241

## 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	5,126	5,041	98.5	6,225	11.3	858	_	858	854	_	854	91,508	38,159	129,666	84.4	6.57	_	133,734
Consum er Products	_	67.7	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	5.42	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	18.0	17.1	1.85	186	0.01	0.07	_	0.07	0.10	_	0.10	_	500	500	0.02	< 0.005	_	502
Total	5,144	5,131	100	6,411	11.3	858	_	858	854	_	854	91,508	38,658	130,166	84.5	6.57	_	134,235
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	5,126	5,041	98.5	6,225	11.3	858	_	858	854	_	854	91,508	38,159	129,666	84.4	6.57	_	133,734
Consum er Products	_	67.7	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	5.42	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Total	5,126	5,114	98.5	6,225	11.3	858	_	858	854	_	854	91,508	38,159	129,666	84.4	6.57	_	133,734
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	210	207	4.04	255	0.46	35.2	_	35.2	35.0	_	35.0	3,404	1,419	4,823	3.14	0.24	_	4,974

Consum er Products	_	12.4	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.99	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	1.62	1.54	0.17	16.8	< 0.005	0.01	_	0.01	0.01	_	0.01	_	40.8	40.8	< 0.005	< 0.005	_	41.0
Total	212	222	4.20	272	0.46	35.2	_	35.2	35.0	_	35.0	3,404	1,460	4,864	3.14	0.24	_	5,015

## 4.4. Water Emissions by Land Use

### 4.4.2. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Total	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Total	_	_	_	_	_	_	_	_	_	_	_	247	1,166	1,413	0.92	0.55	_	1,600
Annual	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Apartme Mid Rise	_	_	_	_	_	_	_	_	_	_	_	41.0	193	234	0.15	0.09	_	265
Total	_	_	_	_	_	_	_	_	_	_	_	41.0	193	234	0.15	0.09	_	265

## 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

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

		7.00	ĺ	J, 12 1 J			au ca			2112 -2				000=	0111			000
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Total	_	_	_	_	_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_		_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Total	_	_	_	_	_	_	_	_	_	_	_	1,180	0.00	1,180	118	0.00	_	4,128
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	195	0.00	195	19.5	0.00	_	683
Total	_	_	_	_	_	_	_	_	_	_	_	195	0.00	195	19.5	0.00	_	683

## 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)

		(1.07 0.1	.,	illy, tolly			(.											
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	22.7	22.7
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.75	3.75
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.75	3.75

## 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Equipme	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	<u> </u>	_		_	_	_		_	_	_	_	_
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)

Equipme nt Type	TOG	ROG	NOx	СО	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)

		(		<i>y</i> , (0, <i>y</i> .		· · · · · · · · · · · · · · · · · · ·		.,,	<b>y</b> ,		,							
Equipme nt Type	TOG	ROG	NOx	СО	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

Vegetatio n	TOG	ROG		со	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	_	_	_	_	_	_	_	 _	_	_	_	 	 _	 _
Iotal														

## 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

												I						
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	196,730	196,730	196,730	71,806,450

## 5.10. Operational Area Sources

#### 5.10.1. Hearths

### 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	_
Wood Fireplaces	1153
Gas Fireplaces	1812
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	330
Conventional Wood Stoves	0
Catalytic Wood Stoves	165
Non-Catalytic Wood Stoves	165
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)
6405480	2,135,160	0.00	0.00	_

### 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	11,172,916	540	0.0330	0.0040	23,323,448

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	115,763,482	0.00

### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	2,189	_

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

and the second s			The same of the sa				I
Land Lea Typa	I Equipment Type	I Dofrigorant		1 Quantity (kg)	I Operations Look Pate	I Sarvica Look Data	Times Serviced
Land USE Type	Equipment Type	The ingeralit	JOWE	Qualitity (Ng)	TOperations Leak Nate	JOHNUE LEAK MAIE	I IIIIes Sei viceu
Land Use Type	Equipment Type	Refrigerant	IGWP	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

## 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

## 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
Equipment 1990	1 401 1990	rtainibor por Day	riodio poi bay	Tiouro por Tour	110100001101	Load I doto!

#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
,					

### 5.17. User Defined

Equipment Type	Fuel Type
_	_

### 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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

## 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	8.12	annual days of extreme heat
Extreme Precipitation	2.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	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	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
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
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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.

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollular Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	29.9
AQ-PM	44.7
AQ-DPM	87.8
Drinking Water	10.4
Lead Risk Housing	46.8
Pesticides	23.2
Toxic Releases	14.1
Traffic	85.7
Effect Indicators	_
CleanUp Sites	0.00
Groundwater	59.6
Haz Waste Facilities/Generators	80.2
Impaired Water Bodies	77.3
Solid Waste	0.00

Sensitive Population	_
Asthma	10.6
Cardio-vascular	30.4
Low Birth Weights	11.8
Socioeconomic Factor Indicators	_
Education	51.2
Housing	45.6
Linguistic	18.1
Poverty	66.4
Unemployment	37.7

## 7.2. Healthy Places Index Scores

Indicator	Result for Project Census Tract
Economic	
Above Poverty	43.59040164
Employed	47.8121391
Median HI	35.63454382
Education	_
Bachelor's or higher	53.18875914
High school enrollment	3.028358784
Preschool enrollment	11.35634544
Transportation	_
Auto Access	33.27345053
Active commuting	58.38573078
Social	_
2-parent households	22.80251508

Alcohol availability         3.08813807           Park access         58.28561401           Relail density         0.14885153           Supermarket access         7.6722965           Tree canopy         3.089979726           Housing            Housing habitability         0.78324003           Housing habitability         3.6846179           Low-inc homeowner severe housing cost burden         4.44373155           Low-inc homeowner severe housing cost burden         4.4437315           Housing Albitability         2.098753           Housing Albitability         2.098753           Housing Carlot Browner severe housing cost burden         2.109778904           Housing Albitability         2.109778904           Housing Albitability         5.5           Housing Albitability         5.5           Housing Albitability         5.1           Housing Carlot Browner         6.5           Housing Albitability         5.5           Housing Albitability         5.5           Housing Albitability         5.5           Housing Albitability         5.5           Life By Description Please         5.5           Chronic Colstructive Pulmonary Disease         5.6	Voting	60.81098422
Park access         56.2561401           Rotal density         80.14885153           Supermarket access         72.1672895           Tire canopy         80.56979725           Housing         -           Housing Aphitability         10.75324009           Low-inch promover sever housing cost burden         40.6565179           Low-inch memowar sever housing cost burden         42.206735           Low-inch renter severe housing cost burden         42.206735           Low-inchreater severe housing cost burden         42.5666341           Uncrowded housing         45.5666341           Health Outcomes         -           Health Outcomes         -           Insured adults         0.10778904           Asthma ER Admissions         53.5           Staff plane         4.3           Scale Pressure         5.3           Cancer (excluding skin)         4.3           Scale Pressure         5.3           Coronary Heart Disease         2.3           Chronic Obstructive Pulmonary Disease         2.1           Life Expectancy at Birth         70.8           Life Expectancy at Birth         70.8           Copyritive Disabled         3.9	Neighborhood	<del>-</del>
Retail density         50.14885153           Supermarket access         7.16733965           Tree canopy         30.05979725           Housing	Alcohol availability	33.06813807
Supermarket access         72.16732955           Tree canopy         80.05979725           Housing         -           Homeownership         10.75324009           Housing habitability         36.4564179           Low-inc homeowner severe housing cost burden         94.4437155           Low-inc renter severe housing cost burden         62.2096753           Heath Outcomes         -           Insured adults         9.10778904           Arthritis         9.1           Ashma ER Admissions         63.5           High Blood Pressure         63.5           Carcer (excluding skin)         43.4           Coronary Disease         43.5           Chronic Obstructive Pulmonary Disease         9.1           Chronic Obstructive Pulmonary Disease         9.1           Disposed Diabetes         6.5           Coronary Lieuter Pulmonary Disease         9.1           Clief Expectancy at Birth         70.8           Coronary Lieuter Pulmonary Disease         9.1           Clief Expectancy at Birth         9.3           Coronary Lieuter Pulmonary Disease         9.3           Clief Expectancy at Birth         9.3           Coronary Lieuter Pulmonary Disease         9.3           Coronary	Park access	56.25561401
Tree canopy         36.0597925           Housing         —           Homeownership         10.75324009           Housing habitability         36.566619           Low-inch bomeowner severe housing cost burden         44.4373155           Low-inch renter sever housing cost burden         2.0996753           Housing habitability         3.5666341           Health Outcomes         —           Insured adults         0.10778904           Arthritis         9.1           Ashma ER Admissions         6.3           High Blood Pressure         6.3           Cancer (excluding skin)         4.3           Ashma         4.1           Chronic Obstructive Pulmonary Disease         2.3           Disposed Diabetes         5.5           Life Expectancy at Birth         7.8           Congitively Disabled         3.7           Physically Disabled         9.3	Retail density	80.14885153
Housing         —           Homeownership         10.75324009           Housing habitability         3.68456179           Low-inc homeowner severe housing cost burden         9.44373155           Low-inc renter severe housing cost burden         6.20967535           Uncrowded housing         3.65665341           Health Outcomes         —           Insured adults         0.10778904           Arthritis         9.1           Asthma ER Admissions         6.3           High Blood Pressure         6.3           Cancer (excluding skin)         4.3           Asthma         6.1           Coronary Heart Disease         2.5           Chronic Obstructive Pulmonary Disease         9.1           Diagnosed Diabetes         9.5           Life Expectancy at Birth         0.8           Copylityely Disabled         9.7           Physically Disabled         9.3	Supermarket access	72.16732965
Homeownership         10.75324009           Housing habitability         43.6546179           Low-inc homeowner severe housing cost burden         94.44373155           Low-inc renter severe housing cost burden         62.0967535           Uncrowded housing         34.5666341           Health Outcomes         -           Insured adults         0.10778904           Arthritis         9.1           Ashma ER Admissions         76.3           Use of excluding skin)         43.3           Ashma         46.1           Coronary Heart Disease         45.1           Chronic Obstructive Pulmonary Disease         9.1           Diagnosed Diabetes         9.5           Life Expectancy at Birth         70.8           Copitively Disabled         9.9	Tree canopy	38.05979725
Housing habitability         43.65456179           Low-inc homeowner severe housing cost burden         44.4373155           Low-inc renter severe housing cost burden         62.0967353           Uncrowded housing         45.5665341           Health Outcomes         -           Insured adults         0.10778904           Arthritis         9.1           Ashma ER Admissions         63.5           High Blood Pressure         63.5           Cancer (excluding skin)         44.3           Ashma         64.1           Coronary Heart Disease         29.1           Chronic Obstructive Pulmonary Disease         99.1           Diagnosed Diabetes         85.5           Life Expectancy at Birth         70.8           Cognitively Disabled         99.7           Physically Disabled         99.3	Housing	_
Low-inc homeowner severe housing cost burden         9.44373155           Low-inc renter severe housing cost burden         62.0967535           Uncrowded housing         3.55665341           Health Outcomes         —           Insured adults         20.10778904           Arthritis         9.1           Ashma ER Admissions         63.5           High Blood Pressure         63.5           Cancer (excluding skin)         43.4           Ashma         61.1           Coronary Heart Disease         93.5           Chonic Obstructive Pulmonary Disease         93.5           Diagnosed Diabetes         85.5           Life Expectancy at Birth         70.8           Cognitively Disabled         93.7           Physically Disabled         93.3	Homeownership	10.75324009
Low-inc renter severe housing cost burden         62.20967535           Uncrowded housing         34.55665341           Health Outcomes         -           Insured adults         20.10778904           Arthritis         29.1           Asthma ER Admissions         63.5           Health Outcomes         24.3           Cancer (excluding skin)         46.1           Coronary Heart Disease         29.1           Chronic Obstructive Pulmonary Disease         29.1           Diagnosed Diabetes         55.5           Life Expectancy at Birth         70.8           Cognitively Disabled         39.7           Physically Disabled         49.3	Housing habitability	43.65456179
Uncrowded housing         34.55665341           Health Outcomes         -           Insured adults         20.10778904           Arthritis         99.1           Asthma ER Admissions         76.3           High Blood Pressure         63.5           Cancer (excluding skin)         24.3           Asthma         46.1           Coronary Heart Disease         23.5           Chronic Obstructive Pulmonary Disease         29.1           Diagnosed Diabetes         58.5           Life Expectancy at Birth         70.8           Cognitively Disabled         39.7           Physically Disabled         49.3	Low-inc homeowner severe housing cost burden	94.44373155
Health Outcomes         —           Insured adults         20.10778904           Arthritis         29.1           Asthma ER Admissions         76.3           High Blood Pressure         63.5           Cancer (excluding skin)         4.3           Asthma         66.1           Coronary Heart Disease         23.5           Chronic Obstructive Pulmonary Disease         29.1           Diagnosed Diabetes         8.5           Life Expectancy at Birth         70.8           Cognitively Disabled         93.7           Physically Disabled         93.3	Low-inc renter severe housing cost burden	62.20967535
Insured adults         20.10778904           Arthritis         29.1           Asthma ER Admissions         6.3           High Blood Pressure         6.5           Cancer (excluding skin)         24.3           Asthma         6.1           Coronary Heart Disease         23.5           Chronic Obstructive Pulmonary Disease         29.1           Diagnosed Diabetes         58.5           Life Expectancy at Birth         70.8           Cognitively Disabled         39.7           Physically Disabled         49.3	Uncrowded housing	34.55665341
Arthritis         29.1           Asthma ER Admissions         76.3           High Blood Pressure         63.5           Cancer (excluding skin)         24.3           Asthma         46.1           Coronary Heart Disease         23.5           Chronic Obstructive Pulmonary Disease         29.1           Diagnosed Diabetes         58.5           Life Expectancy at Birth         70.8           Cognitively Disabled         39.7           Physically Disabled         49.3	Health Outcomes	_
Asthma ER Admissions       76.3         High Blood Pressure       63.5         Cancer (excluding skin)       24.3         Asthma       46.1         Coronary Heart Disease       23.5         Chronic Obstructive Pulmonary Disease       29.1         Diagnosed Diabetes       58.5         Life Expectancy at Birth       70.8         Cognitively Disabled       39.7         Physically Disabled       49.3	Insured adults	20.10778904
High Blood Pressure 63.5 Cancer (excluding skin) 24.3 Asthma 46.1 Coronary Heart Disease 23.5 Chronic Obstructive Pulmonary Disease 29.1 Diagnosed Diabetes 58.5 Life Expectancy at Birth 70.8 Cognitively Disabled 99.7 Physically Disabled 49.3	Arthritis	29.1
Cancer (excluding skin)24.3Asthma46.1Coronary Heart Disease23.5Chronic Obstructive Pulmonary Disease29.1Diagnosed Diabetes58.5Life Expectancy at Birth70.8Cognitively Disabled39.7Physically Disabled49.3	Asthma ER Admissions	76.3
Asthma 46.1 Coronary Heart Disease 23.5 Chronic Obstructive Pulmonary Disease 29.1 Diagnosed Diabetes 58.5 Life Expectancy at Birth 70.8 Cognitively Disabled 39.7 Physically Disabled 49.3	High Blood Pressure	63.5
Coronary Heart Disease Chronic Obstructive Pulmonary Disease Chronic Obstructive Pulmonary Disease Diagnosed Diabetes 58.5 Life Expectancy at Birth Cognitively Disabled Physically Disabled 49.3	Cancer (excluding skin)	24.3
Chronic Obstructive Pulmonary Disease  Diagnosed Diabetes  58.5  Life Expectancy at Birth  Cognitively Disabled  Physically Disabled  29.1  70.8  49.3	Asthma	46.1
Diagnosed Diabetes  Life Expectancy at Birth  Cognitively Disabled  Physically Disabled  58.5  70.8  39.7  49.3	Coronary Heart Disease	23.5
Life Expectancy at Birth  Cognitively Disabled  Physically Disabled  70.8  39.7  49.3	Chronic Obstructive Pulmonary Disease	29.1
Cognitively Disabled 39.7 Physically Disabled 49.3	Diagnosed Diabetes	58.5
Physically Disabled 49.3	Life Expectancy at Birth	70.8
	Cognitively Disabled	39.7
Heart Attack ER Admissions 87.2	Physically Disabled	49.3
	Heart Attack ER Admissions	87.2

Mental Health Not Good	44.5
Chronic Kidney Disease	35.4
Obesity	54.6
Pedestrian Injuries	43.7
Physical Health Not Good	49.1
Stroke	34.3
Health Risk Behaviors	_
Binge Drinking	10.6
Current Smoker	43.7
No Leisure Time for Physical Activity	51.7
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	54.1
Children	69.7
Elderly	26.2
English Speaking	38.1
Foreign-born	29.6
Outdoor Workers	36.9
Climate Change Adaptive Capacity	_
Impervious Surface Cover	25.2
Traffic Density	95.7
Traffic Access	23.0
Other Indices	_
Hardship	54.8
Other Decision Support	_
2016 Voting	71.6

#### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	29.0
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.

#### 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	Pop & Housing section: The population determined for the 3,295 new residential units are based on calculations developed by the city for the 2015 General Plan EIR to estimate population at buildout. The estimate assumes 2.63 persons per household, with a 5.5 percent vacancy rate, and 0.86 percent of residents as group quarters (3,295 * 2.63 * 0.945 *1.0086 = 8,260).
Operations: Water and Waste Water	WTP 100% aerobic

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.

# Alt 2 Carlsbad GPU EIR Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Alt 2 Carlsbad GPU EIR
Operational Year	2024
Lead Agency	_
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	21.8
Location	33.1599237850095, -117.34862128462754
County	San Diego
City	Carlsbad
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6228
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.14

## 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	3,338	Dwelling Unit	87.8	3,204,480	0.00	0.00	8,367	_

### 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	5,245	5,223	166	7,108	13.1	871	141	1,012	867	35.9	902	94,148	233,824	327,971	213	12.4	700	337,689
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	5,227	5,206	170	6,836	13.0	871	141	1,012	866	35.9	902	94,148	225,481	319,628	213	12.7	40.5	328,770
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1,209	1,255	92.7	2,050	4.20	197	141	338	196	35.9	232	22,272	196,953	219,225	146	7.52	315	225,438
Annual (Max)	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_
Unmit.	221	229	16.9	374	0.77	35.9	25.8	61.7	35.8	6.54	42.3	3,687	32,608	36,295	24.2	1.25	52.2	37,324

## 2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer																		
(Max)																		

Mobile	32.5	25.1	58.3	611	1.66	1.27	141	143	1.19	35.9	37.0	_	169,166	169,166	4.97	5.07	677	171,479
Area	5,212	5,198	102	6,494	11.4	869	_	869	865	_	865	92,702	39,163	131,865	85.6	6.66	_	135,987
Energy	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	24,314	24,314	1.69	0.14	_	24,398
Water	_	_	_	-	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Waste	_	_	_	_	_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Total	5,245	5,223	166	7,108	13.1	871	141	1,012	867	35.9	902	94,148	233,824	327,971	213	12.4	700	337,689
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	32.6	25.2	63.9	527	1.58	1.27	141	143	1.19	35.9	37.0	_	161,329	161,329	4.91	5.37	17.6	163,068
Area	5,193	5,181	99.8	6,306	11.4	869	_	869	865	_	865	92,702	38,656	131,359	85.5	6.65	_	135,479
Energy	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	24,314	24,314	1.69	0.14	_	24,398
Water	_	_	_	_	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Waste	_	_	_	_	_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Total	5,227	5,206	170	6,836	13.0	871	141	1,012	866	35.9	902	94,148	225,481	319,628	213	12.7	40.5	328,770
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	32.5	25.1	63.4	538	1.60	1.27	141	143	1.19	35.9	37.0	_	162,524	162,524	4.92	5.33	292	164,528
Area	1,176	1,230	23.3	1,510	2.57	195	_	195	194	_	194	20,826	8,934	29,760	19.2	1.50	_	30,687
Energy	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	24,314	24,314	1.69	0.14	_	24,398
Water	_	_	_		_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Waste	_	_	_		_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Refrig.	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Total	1,209	1,255	92.7	2,050	4.20	197	141	338	196	35.9	232	22,272	196,953	219,225	146	7.52	315	225,438
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	5.93	4.59	11.6	98.2	0.29	0.23	25.8	26.0	0.22	6.54	6.76	_	26,908	26,908	0.81	0.88	48.4	27,240
Area	215	224	4.26	276	0.47	35.6	_	35.6	35.5	_	35.5	3,448	1,479	4,927	3.18	0.25	_	5,081

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Energy	0.13	0.06	1.09	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	4,025	4,025	0.28	0.02	_	4,039
Water	_	_	_	_	_	_	<u> </u>	_	_	_	_	41.5	195	237	0.15	0.09	_	268
Waste	_	_	_	_	_	_	_	_	_	_	_	198	0.00	198	19.8	0.00	_	692
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.80	3.80
Total	221	229	16.9	374	0.77	35.9	25.8	61.7	35.8	6.54	42.3	3,687	32,608	36,295	24.2	1.25	52.2	37,324

# 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

Ontona	Ollatari	to (ib/aa						b/day loi	daily, iv									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	16,742	16,742	1.02	0.12	_	16,804
Total	_	_	_	_	_	_	_	_	_	_	_	_	16,742	16,742	1.02	0.12	_	16,804
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	16,742	16,742	1.02	0.12	_	16,804

Total	_	_	_	_	_	_	_	_	_	_	-	_	16,742	16,742	1.02	0.12	_	16,804
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	2,772	2,772	0.17	0.02	_	2,782
Total	_	_	_	_	_	_	_	_	_	_	_	_	2,772	2,772	0.17	0.02	_	2,782

## $4.2.3. \ Natural \ Gas \ Emissions \ By \ Land \ Use$ - Unmitigated

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

			<i>j</i>	J,		, ,	(		· J,	, ,	/					_		
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	7,572	7,572	0.67	0.01	_	7,593
Total	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	7,572	7,572	0.67	0.01	_	7,593
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	7,572	7,572	0.67	0.01	_	7,593
Total	0.70	0.35	5.97	2.54	0.04	0.48	_	0.48	0.48	_	0.48	_	7,572	7,572	0.67	0.01	_	7,593
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Apartme nts Mid Rise	0.13	0.06	1.09	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	1,254	1,254	0.11	< 0.005	_	1,257
Total	0.13	0.06	1.09	0.46	0.01	0.09	_	0.09	0.09	_	0.09	_	1,254	1,254	0.11	< 0.005	_	1,257

# 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	5,193	5,107	99.8	6,306	11.4	869	_	869	865	_	865	92,702	38,656	131,359	85.5	6.65	_	135,479
Consum er Products	_	68.6	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	5.50	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	18.3	17.3	1.88	189	0.01	0.07	_	0.07	0.10	_	0.10	_	506	506	0.02	< 0.005		508
Total	5,212	5,198	102	6,494	11.4	869	_	869	865	_	865	92,702	39,163	131,865	85.6	6.66	_	135,987
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	5,193	5,107	99.8	6,306	11.4	869	_	869	865	_	865	92,702	38,656	131,359	85.5	6.65	_	135,479
Consum er Products	_	68.6	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_
Architect ural Coatings	_	5.50	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	5,193	5,181	99.8	6,306	11.4	869	_	869	865	_	865	92,702	38,656	131,359	85.5	6.65	_	135,479
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	213	209	4.09	259	0.47	35.6	_	35.6	35.5	_	35.5	3,448	1,438	4,886	3.18	0.25	_	5,039

Consum er Products	_	12.5	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	1.00	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	1.64	1.56	0.17	17.0	< 0.005	0.01	_	0.01	0.01	_	0.01	_	41.3	41.3	< 0.005	< 0.005	_	41.5
Total	215	224	4.26	276	0.47	35.6	_	35.6	35.5	_	35.5	3,448	1,479	4,927	3.18	0.25	_	5,081

# 4.4. Water Emissions by Land Use

## 4.4.2. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Total	_	_	_	_	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Total	_	_	_	_	_	_	_	_	_	_	_	251	1,181	1,431	0.93	0.56	_	1,621
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Apartme Mid Rise	_	_	_	_	_	_	_	_	_	_	_	41.5	195	237	0.15	0.09	_	268
Total	_	_	_	_	_	_	_	_	_	_	_	41.5	195	237	0.15	0.09	_	268

# 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

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

		( )		<i>y</i> , <i>y</i>			<del></del>		J,	- 7								
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Total	_	_	_	_	_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_		_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Total	_	_	_	_	_	_	_	_	_	_	_	1,195	0.00	1,195	119	0.00	_	4,181
Annual	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	198	0.00	198	19.8	0.00	_	692
Total	_	_	_	_	_	_	_	_	_	_	_	198	0.00	198	19.8	0.00	_	692

# 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)

		(1.07 0.1	,	illy, tolly			(.											
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	23.0	23.0
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Apartme nts Mid Rise	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.80	3.80
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.80	3.80

# 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
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)

Equipme nt Type	TOG	ROG	NOx	СО	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)

Equipme nt Type	TOG	ROG	NOx	со	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

Vegetatio n		ROG							PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_		_		_	_	_	_	_	_	_		_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

T/	otal	 	 	_	 _	 	 _	 	 	 	
- 10	Mai										

#### 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	со	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

Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_		_	_		_	_	_	_	_	_	_	_	
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_		_	_		_	_	_	_	_	_	_	_	
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Subtotal	_	_	_	_	_		_	_		_	_	_	_	_	_	_	_	
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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	200,147	200,147	200,147	73,053,655

# 5.10. Operational Area Sources

#### 5.10.1. Hearths

### 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	_
Wood Fireplaces	1168
Gas Fireplaces	1836
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	334
Conventional Wood Stoves	0
Catalytic Wood Stoves	167
Non-Catalytic Wood Stoves	167
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)
6489072	2,163,024	0.00	0.00	_

## 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	11,318,724	540	0.0330	0.0040	23,627,820

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	117,274,204	0.00

### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	2,218	_

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

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and the state of t	나는 그 사람들이 얼마 얼마 없었다.	In the second	OWD	0 (1)	10 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1
II and I Ise Ivne	Equipment Type	Refrigerant	I(4WP	I ( )Hantity (kg)	Operations Leak Rate	I Service Leak Rate	Limes Serviced
Land Use Type	TEQUIPMENT TYPE	Tromgorant	OWI	Quantity (kg)	TOPOTATIONS LOAK MAIC	OCIVIOC ECAN MAIC	Times out viceu

A		Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
A	•	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	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

# 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
Equipment Type	Fuel Type	Mulliber per Day	Thous per Day	riours per real	l iorsebower	Luau Faciui

#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
,					

### 5.17. User Defined

Equipment Type	Fuel Type
_	_

## 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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

## 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	8.12	annual days of extreme heat
Extreme Precipitation	2.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	0	0	0	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	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
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

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 pollul Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	29.9
AQ-PM	44.7
AQ-DPM	87.8
Drinking Water	10.4
Lead Risk Housing	46.8
Pesticides	23.2
Toxic Releases	14.1
Traffic	85.7
Effect Indicators	_
CleanUp Sites	0.00
Groundwater	59.6
Haz Waste Facilities/Generators	80.2
Impaired Water Bodies	77.3
Solid Waste	0.00

Sensitive Population	_
Asthma	10.6
Cardio-vascular	30.4
Low Birth Weights	11.8
Socioeconomic Factor Indicators	
Education	51.2
Housing	45.6
Linguistic	18.1
Poverty	66.4
Unemployment	37.7

# 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	43.59040164
Employed	47.8121391
Median HI	35.63454382
Education	_
Bachelor's or higher	53.18875914
High school enrollment	3.028358784
Preschool enrollment	11.35634544
Transportation	_
Auto Access	33.27345053
Active commuting	58.38573078
Social	_
2-parent households	22.80251508

Voting	60.81098422
Neighborhood	_
Alcohol availability	33.06813807
Park access	56.25561401
Retail density	80.14885153
Supermarket access	72.16732965
Tree canopy	38.05979725
Housing	_
Homeownership	10.75324009
Housing habitability	43.65456179
Low-inc homeowner severe housing cost burden	94.44373155
Low-inc renter severe housing cost burden	62.20967535
Uncrowded housing	34.55665341
Health Outcomes	_
Insured adults	20.10778904
Arthritis	29.1
Asthma ER Admissions	76.3
High Blood Pressure	63.5
Cancer (excluding skin)	24.3
Asthma	46.1
Coronary Heart Disease	23.5
Chronic Obstructive Pulmonary Disease	29.1
Diagnosed Diabetes	58.5
Life Expectancy at Birth	70.8
Cognitively Disabled	39.7
Physically Disabled	49.3
Heart Attack ER Admissions	87.2

Mental Health Not Good	44.5
Chronic Kidney Disease	35.4
Obesity	54.6
Pedestrian Injuries	43.7
Physical Health Not Good	49.1
Stroke	34.3
Health Risk Behaviors	_
Binge Drinking	10.6
Current Smoker	43.7
No Leisure Time for Physical Activity	51.7
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	54.1
Children	69.7
Elderly	26.2
English Speaking	38.1
Foreign-born	29.6
Outdoor Workers	36.9
Climate Change Adaptive Capacity	_
Impervious Surface Cover	25.2
Traffic Density	95.7
Traffic Access	23.0
Other Indices	_
Hardship	54.8
Other Decision Support	_
2016 Voting	71.6

#### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	30.0
Healthy Places Index Score for Project Location (b)	29.0
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.

#### 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	Pop & Housing section: (3,338 * 2.63 * 0.945 *1.0086 = 8,367).
Operations: Water and Waste Water	WTP 100% aerobic

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.