Appendix E

Energy Calculations

Sunset Vine
SCEA
Appendix E
Energy Analysis Spreadsheets

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Sunset Vine

Summary of Energy Use During Construction

Electricty		
Water Consumption	1,542	kWh
Temporary Power (lighting, tools)	15,876	kWh
Electric Equipment	2,540	kWh
Total:	**19,958**	kWh
Gasoline		
On Road	104,801	Gallons
Off Road	0	Gallons
Total:	**104,801**	Gallons
Diesel		
On Road	145,594	Gallons
Off Road	47,743	Gallons
Total:	**193,337**	Gallons
Total Mobile	**298,138**	

Summary of Energy Use During Operations

	Baseline (Buildout Year)	Buildout Without Project Features	Buildout With Project Features	Percent Reduction due to Project Features	Project Without Project Features - Baseline (Buildout)	Project (Buildout - Baseline (Buildout)	Reduction (%)	Units
Electricity								
Electricity (building)	446,464	1,923,052	1,923,052	0%	1,476,588	1,476,588	0%	kWh/year
Electricity (water)	44,303	101,946	101,946	0%	57,643	57,643	0%	kWh/year
EV Charging	0	27,775	27,775	-	27,775	27,775	0%	kWh/year
Electricity Total	**490,767**	**2,052,772**	**2,052,772**	**0%**	**1,562,005**	**1,562,005**	0%	**kWh/year**
Natural Gas	**1,201,857**	**1,115,177**	**1,115,177**	**0%**	-86,680	-86,680	0%	**cu ft/year**
Mobile								
Gasoline	68,471	204,353	138,827	-32%	135,882	70,356	-48%	Gallons/year
Diesel	11,362	33,909	23,036	-32%	22,547	11,674	-48%	Gallons/year
Mobile Total	**79,832**	**238,262**	**161,863**	**-32%**	158,429	82,030	-48%	**Gallons/year**

Construction Electricity Usage

Caterpillar 40-C4.4 Generator[a]

Peak Power Rating - Prime (kW)	36
Typical Load	70%
Average Output (kW)	25.2
Hours per Day	2
Average Daily Output (kWh)	50.4
Building Construction Phase Duration (days)	315
Total Construction (kWh)	15,876
Total Construction (MWh)	15.9

[a]https://www.albancat.com/content/uploads/2014/06/40-C4.4-Spec-Sheet.pdf

Calculation of Diesel Usage During Cosnstruciton (Offroad Equipment):

Phase Name	Off Road Equipment Type	Units	Hours	HP	Load Factor	Avg. Daily Factor	Number of Days	Diesel Fuel Usage	
Demolition	Concrete/Industrial Saws	1	8	33	0.73	0.6	34	197	
Demolition	Excavators	2	8	158	0.38	0.6	34	980	
Demolition	Generator Sets	2	8	14	0.74	0.6	34	169	
Demolition	Other Construction Equipment	1	8	82	0.42	0.6	34	281	
Demolition	Rubber Tired Loaders	1	8	150	0.36	0.6	34	441	
Demolition	Signal Boards	2	8	6	0.82	0.6	34	80	
Demolition	Skid Steer Loaders	1	8	71	0.37	0.6	34	214	
Demolition	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	34	254	
Demolition	Welders	1	8	46	0.45	0.6	34	169	
Grading	Excavators	2	8	158	0.38	0.6	71	2,046	
Grading	Generator Sets	1	8	14	0.74	0.6	71	177	
Grading	Other Construction Equipment	1	8	82	0.42	0.6	71	587	
Grading	Plate Compactors	1	8	8	0.43	0.6	71	59	
Grading	Rollers	1	8	36	0.38	0.6	71	233	
Grading	Rubber Tired Loaders	2	8	150	0.36	0.6	71	1,840	
Grading	Signal Boards	2	8	6	0.82	0.6	71	168	
Grading	Skid Steer Loaders	1	8	71	0.37	0.6	71	448	
Grading	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	71	530	
Grading	Welders	2	8	46	0.45	0.6	71	705	
Parking Structure	Air Compressors	1	8	37	0.48	0.6	162	691	
Parking Structure	Cement and Mortar Mixers	3	8	10	0.56	0.6	162	653	
Parking Structure	Concrete/Industrial Saws	2	8	33	0.73	0.6	162	1,873	
Parking Structure	Cranes	1	8	367	0.29	0.6	162	4,138	
Parking Structure	Forklifts	1	8	82	0.2	0.6	162	638	
Parking Structure	Generator Sets	1	8	14	0.74	0.6	162	403	
Parking Structure	Other Construction Equipment	1	8	82	0.42	0.6	162	1,339	
Parking Structure	Pumps	1	8	11	0.74	0.6	162	316	
Parking Structure	Signal Boards	2	8	6	0.82	0.6	162	383	
Parking Structure	Skid Steer Loaders	1	8	71	0.37	0.6	162	1,021	
Parking Structure	Welders	2	8	46	0.45	0.6	162	1,610	
Building Construction	Air Compressors	2	8	37	0.48	0.6	315	2,685	
Building Construction	Concrete/Industrial Saws	1	8	33	0.73	0.6	315	1,821	
Building Construction	Cranes	1	8	367	0.29	0.6	315	8,046	
Building Construction	Forklifts	2	8	82	0.2	0.6	315	2,480	
Building Construction	Generator Sets	1	8	14	0.74	0.6	315	783	
Building Construction	Other Construction Equipment	1	8	82	0.42	0.6	315	2,604	
Building Construction	Pumps	1	8	11	0.74	0.6	315	615	
Building Construction	Signal Boards	2	8	6	0.82	0.6	315	744	
Building Construction	Welders	1	8	46	0.45	0.6	315	1,565	
Paving	Air Compressors	1	8	37	0.48	0.6	65	277	
Paving	Cement and Mortar Mixers	1	8	10	0.56	0.6	65	87	
Paving	Concrete/Industrial Saws	1	8	33	0.73	0.6	65	376	
Paving	Cranes	1	8	367	0.29	0.6	65	1,660	
Paving	Forklifts	1	8	82	0.2	0.6	65	256	
Paving	Pumps	1	8	11	0.74	0.6	65	127	
Paving	Plate Compactors	1	8	8	0.43	0.6	65	54	
Paving	Rollers	1	8	36	0.38	0.6	65	213	
Paving	Signal Boards	2	8	6	0.82	0.6	65	154	
Paving	Skid Steer Loaders	1	8	71	0.37	0.6	65	410	
						Total Diesel Usage for Construction (Offr		**47,742.8**	**gallons of diesel fuel**

gallons of diesel fuel per horsepower-hour=	0.05

Notes: Equipment assumptions are provide in the CalEEMod output files and fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

EMFAC2021 Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	Veh_Class	Fuel	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)	Miles per Gallon
South Coast	LDA	Gasoline	Aggregate	3,388,823	134,787,726	15,748,887	4,682	0	28.8
South Coast	LDT1	Gasoline	Aggregate	318,253	11,637,173	1,401,220	483	0	24.1
South Coast	LDT2	Gasoline	Aggregate	1,590,817	65,943,414	7,487,016	2,819	0	23.4
						Construction Worker Trip (Composite LDA/LDT1/LDT2):			**26.3**
South Coast	HHDT	Diesel	Aggregate	53,754	6,853,263	838,229	0	1133.1	**6.0**

Notes: Consistent with CalEEMod, a construction worker trip is assumed to be a composite of 50% LDA , 25% for LDT1, and 25% for LDT2. Used EMFAC 2011 Categories for construciton as EMFAC2011 has specific categories for vehicle class T7.

Calculation of Gasoline and Diesel Usage During Construction (Onroad Vehicles):

Phase Name	Daily Worker Trips	Daily Vendor Trips	Daily Haul Trips	Days	Total Worker Trips	Total Vendor Trips	Total Haul Trips	Trip Length (miles)			Total Length (miles)			Avg. Daily Factor	Gallons of Fuel	
								Worker	Vendor	Haul	Worker	Vendor	Haul	(worker and vendor)	Gasoline	Diesel
Demolition	30	0	100	34	1020	0	3400	18.5	10.5	28	18870	0	95200	0.6	431.1	15,740.8
Grading	30	0	160	71	2130	0	11360	18.5	10.5	28	39405	0	318080	0.6	900.3	52,592.8
Parking Structure	130	180	0	162	21060	29160	0	18.5	10.5	20	389610	306180	0	0.6	8,901.1	30,375.1
Building Construction	700	140	0	315	220500	44100	0	18.5	10.5	20	4079250	463050	0	0.6	93,195.2	45,937.7
Paving	50	14	0	65	3250	910	0	18.5	10.5	20	60125	9555	0	0.6	1,373.6	947.9
Architectural Coating	0	0	0	83	0	0	0	18.5	10.5	20	0	0	0	0.6	0.0	0.0
														Total:	**104,801.3**	**145,594.3**

Worker Miles per gallon=	26.26	gasoline
Vedor/Haul miles per gallon=	6.05	diesel

Notes: Consistent with CalEEMod worker vehicles are assumed to be gasoline and 50% LDA, 25%LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy Duty Trucks (T7)

Water Usage for Control of Fugitive Dust during Construction:

Phase	Days	Average Daily Acreage Distrubed	Gallons Per Year	Electricity (kWhr)
Demolition	34	0.5	51,340	499
Grading	71	0.5	107,210	1,043
Parking Structure	162	0	0	0
Building Construction	315	0	0	0
Paving	65	0	0	0
Architectural Coating	83	0	0	0
		Total:	**158,550**	**1,542**

Water application rate=	3020	gal/acre/day
kWhr equivalent=	0.01	kWhr

Notes: 1) Gallons per year of water usage for dust control is calculated based on a minimum control efficiency of 66% (three times daily) with an application rate of 3,020 gal/acre/day (Air & Waste Management Association Air Pollution Engineering Manual (1992 Edition)) and average of 26 construction days per month.
2) CalEEMod Default: Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

Sunset Vine - Existing Operations Buildout Year
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Condo/Townhouse	2	Dwelling Uni	0.125	2120	6
High Turnover (Sit Down Restaurant)	12.793	1000sqft	0.293686862	12793	0
Parking Lot	25	1000sqft	0.573921017	0	

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Annual VMT*
	Weekday	*Saturday*	*Sunday*	
Total	**766.00**	**766.00**	**766.00**	**1,816,240**

Gasoline and Diesel Usage

	Buildout Year		Existing (Baseline) Year	
	Gasoline	*Diesel*	*Gasoline*	*Diesel*
Miles/Gallon	25.1	8.8	23.8	8.4
% Fleet Mix	94.5%	5.5%	94.9%	5.1%
Total (Gallons):	**68,471**	**11,362**	**72,290**	**11,057**

Energy by Land Use - Natural Gas

Land Uses	*kBTU/yr*	cu ft/year
Condo/Townhouse	50,074	47,690
High Turnover (Sit Down Restaurant)	1,211,876	1,154,168
Parking Lot	0	0
Total	**1,261,950**	**1,201,857**

Energy by Land Use - Electricity

Land Uses	*kWH/yr*
Condo/Townhouse	7,895
High Turnover (Sit Down Restaurant)	416,669
Parking Lot	21,900
Total	446,464

Water Detail

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Condo/Townhouse	0.075	0.013	953
High Turnover (Sit Down Restaurant)	3.883	0.021	43,350
Parking Lot	0.000	0.000	0
Total	3.958	0.034	**44,303**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

Sunset Vine - Buildout Operations Without Project Features
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Apartments Mid Rise	170	Dwelling Unit	1.74	163,200	383
High Turnover (Sit Down Restaurant)	16.68	1000sqft	0	16,680	
Enclosed Parking with Elevator	284	Space	2.55599989	113,600	
Other Non-Asphalt Surfaces	17.211	1000sqft	0.395110185	0	
Recreational Swimming Pool	0.6	1000sqft	0.013774104	600	

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Annual VMT*
	Weekday	*Saturday*	*Sunday*	
Total	2,444	2,444	2,444	5,420,615

Gasoline and Diesel Usage

	Gasoline	*Diesel*
Miles/Gallon	25.1	8.8
% Fleet Mix	94.5%	5.5%
Total (Gallons):	**204,353**	**33,909**

Note: Fleet mix is 92.3% gasoline @ 30.6 miles/gallon and 7.7% diesel @ 12.1 miles/gallon.

Energy by Land Use - Natural Gas

Land Uses	*kBTU/yr*	cu ft/year
Apartments Mid Rise	0	0
High Turnover (Sit Down Restaurant)	1,170,936	1,115,177
Enclosed Parking with Elevator	0	0
Other Non-Asphalt Surfaces	0	0
Recreational Swimming Pool	0	0
Total	1,170,936	**1,115,177**

Energy by Land Use - Electricity

Land Uses	*kWH/yr*
Apartments Mid Rise	903,124
High Turnover (Sit Down Restaurant)	569,657
Enclosed Parking with Elevator	419,347
Other Non-Asphalt Surfaces	0
Recreational Swimming Pool	30,924
Total	**1,923,052**

Water Detail (Unmitigated)

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Apartments Mid Rise	5.069	0.031	56,627
High Turnover (Sit Down Restaurant)	4.050	0.000	45,003
Enclosed Parking with Elevator	0.000	0.000	0
Other Non-Asphalt Surfaces	0.000	0.000	0
Recreational Swimming Pool	0.028	0.000	315
Total	9.15	0.03	**101,946**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

Sunset Vine - Buildout Operations
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Apartments Mid Rise	170	Dwelling Unit	1.74	163200	383
High Turnover (Sit Down Restaurant)	16.68	1000sqft	0	16680	
Enclosed Parking with Elevator	284	Space	2.55599989	113600	
Other Non-Asphalt Surfaces	17.211	1000sqft	0.395110185	0	
Recreational Swimming Pool	0.6	1000sqft	0.013774104	600	

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Mitigated*
	Weekday	*Saturday*	*Sunday*	
Total	1,600	1,600	1,600	3,682,485

Mitigated Gasoline and Diesel Usage

	Gasoline	*Diesel*
Miles/Gallon	25.1	8.8
% Fleet Mix	94.5%	5.5%
Total (Gallons):	**138,827**	**23,036**

Note: Fleet mix is 92.3% gasoline @ 30.6 miles/gallon and 7.7% diesel @ 12.1 miles/gallon.

Energy by Land Use - Natural Gas (Mitigated)

Land Uses	*kBTU/yr*	cu ft/year
Apartments Mid Rise	0	0
High Turnover (Sit Down Restaurant)	1,170,936	1,115,177
Enclosed Parking with Elevator	0	0
Other Non-Asphalt Surfaces	0	0
Recreational Swimming Pool	0	0
Total	1,170,936	**1,115,177**

Energy by Land Use - Electricity (Mitigated)

Land Uses	*kWH/yr*
Apartments Mid Rise	903,124
High Turnover (Sit Down Restaurant)	569,657
Enclosed Parking with Elevator	419,347
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Recreational Swimming Pool	30,924
Total	**1,923,052**

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Apartments Mid Rise	5.069	0.031	56,627
High Turnover (Sit Down Restaurant)	4.050	0.000	45,003
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Other Non-Asphalt Surfaces	0.000	0.000	0
Recreational Swimming Pool	0.028	0.000	315
Total	9.15	0.03	**101,946**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr ofelectricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod). The City of Los Angeles Green Building Code (Chapter IX, Article 9, of the LAMC) requires newly constructed non-residential and high-rise residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20 percent reduction in baseline water use. No reduction was applied to Elysian apartments.

EMFAC2021 Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2026	Annual	HHDT	Diesel	Aggregated	Aggregated	56,774	7,075,238	888,983	0.00	1,137.39
Los Angeles	2026	Annual	HHDT	Gasoline	Aggregated	Aggregated	32	2,556	636	0.60	0.00
Los Angeles	2026	Annual	LDA	Diesel	Aggregated	Aggregated	7,604	223,728	31,267	0.00	5.43
Los Angeles	2026	Annual	LDA	Gasoline	Aggregated	Aggregated	3,294,447	129,517,422	15,284,837	4,348.93	0.00
Los Angeles	2026	Annual	LDT1	Diesel	Aggregated	Aggregated	92	1,780	254	0.00	0.08
Los Angeles	2026	Annual	LDT1	Gasoline	Aggregated	Aggregated	309,047	11,251,578	1,361,992	452.49	0.00
Los Angeles	2026	Annual	LDT2	Diesel	Aggregated	Aggregated	5,512	235,023	26,497	0.00	7.36
Los Angeles	2026	Annual	LDT2	Gasoline	Aggregated	Aggregated	1,657,464	68,121,910	7,802,414	2,800.01	0.00
Los Angeles	2026	Annual	LHDT1	Diesel	Aggregated	Aggregated	63,748	2,790,672	801,871	0.00	134.85
Los Angeles	2026	Annual	LHDT1	Gasoline	Aggregated	Aggregated	126,346	5,055,908	1,882,373	358.04	0.00
Los Angeles	2026	Annual	LHDT2	Diesel	Aggregated	Aggregated	29,199	1,249,448	367,282	0.00	71.32
Los Angeles	2026	Annual	LHDT2	Gasoline	Aggregated	Aggregated	19,134	715,698	285,068	58.26	0.00
Los Angeles	2026	Annual	MCY	Gasoline	Aggregated	Aggregated	157,750	1,027,979	315,500	24.78	0.00
Los Angeles	2026	Annual	MDV	Diesel	Aggregated	Aggregated	11,515	444,014	54,012	0.00	18.51
Los Angeles	2026	Annual	MDV	Gasoline	Aggregated	Aggregated	983,860	37,575,422	4,569,223	1,895.54	0.00
Los Angeles	2026	Annual	MH	Diesel	Aggregated	Aggregated	5,962	62,775	596	0.00	6.30
Los Angeles	2026	Annual	MH	Gasoline	Aggregated	Aggregated	15,047	152,784	1,505	31.54	0.00
Los Angeles	2026	Annual	MHDT	Diesel	Aggregated	Aggregated	63,106	2,623,565	776,162	0.00	291.63
Los Angeles	2026	Annual	MHDT	Gasoline	Aggregated	Aggregated	14,163	775,954	283,382	147.17	0.00
Los Angeles	2026	Annual	OBUS	Diesel	Aggregated	Aggregated	2,251	170,564	29,511	0.00	24.28
Los Angeles	2026	Annual	OBUS	Gasoline	Aggregated	Aggregated	3,514	134,350	70,309	26.17	0.00
Los Angeles	2026	Annual	SBUS	Diesel	Aggregated	Aggregated	1,845	37,527	26,720	0.00	5.06
Los Angeles	2026	Annual	SBUS	Gasoline	Aggregated	Aggregated	1,491	68,409	5,964	7.54	0.00
Los Angeles	2026	Annual	UBUS	Diesel	Aggregated	Aggregated	36	5,942	142	0.00	0.93
Los Angeles	2026	Annual	UBUS	Gasoline	Aggregated	Aggregated	435	30,712	1,741	6.65	0.00
Los Angeles	2026	Annual	LDA	Plug-in Hybrid	Aggregated	Aggregated	105,578	2,259,417	436,567	82.30	0.00
Los Angeles	2026	Annual	LDT1	Plug-in Hybrid	Aggregated	Aggregated	902	19,115	3,731	0.70	0.00
Los Angeles	2026	Annual	LDT2	Plug-in Hybrid	Aggregated	Aggregated	19,023	402,642	78,660	14.79	0.00
Los Angeles	2026	Annual	MDV	Plug-in Hybrid	Aggregated	Aggregated	11,552	227,852	47,769	8.49	0.00

					MPG	Gallons Per Mile
Totals	272,259,980.06		10,263.99	1,703.12	**22.8**	0.04
Total (GAS)	257,339,706.19	0.95			**25.1**	0.04
Total (DSL)	14,920,273.88	0.05			**8.8**	0.11

Baseline Year
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2023	Annual	HHDT	Diesel	Aggregated	Aggregated	51,746	6,735,516	804,221	0.00	1,127.80
Los Angeles	2023	Annual	HHDT	Gasoline	Aggregated	Aggregated	52	3,245	1,050	0.82	0.00
Los Angeles	2023	Annual	LDA	Diesel	Aggregated	Aggregated	9,775	293,631	40,275	0.00	7.39
Los Angeles	2023	Annual	LDA	Gasoline	Aggregated	Aggregated	3,441,157	137,073,184	16,009,115	4,845.08	0.00
Los Angeles	2023	Annual	LDT1	Diesel	Aggregated	Aggregated	135	2,742	393	0.00	0.12
Los Angeles	2023	Annual	LDT1	Gasoline	Aggregated	Aggregated	323,318	11,785,010	1,422,834	497.89	0.00
Los Angeles	2023	Annual	LDT2	Diesel	Aggregated	Aggregated	4,736	207,450	22,903	0.00	6.82
Los Angeles	2023	Annual	LDT2	Gasoline	Aggregated	Aggregated	1,558,893	64,432,894	7,331,380	2,816.72	0.00
Los Angeles	2023	Annual	LHDT1	Diesel	Aggregated	Aggregated	54,739	2,400,706	688,551	0.00	118.37
Los Angeles	2023	Annual	LHDT1	Gasoline	Aggregated	Aggregated	126,299	4,975,896	1,881,670	379.01	0.00
Los Angeles	2023	Annual	LHDT2	Diesel	Aggregated	Aggregated	24,419	1,058,012	307,155	0.00	62.09
Los Angeles	2023	Annual	LHDT2	Gasoline	Aggregated	Aggregated	19,347	720,926	288,247	62.66	0.00
Los Angeles	2023	Annual	MCY	Gasoline	Aggregated	Aggregated	147,384	966,253	294,767	23.59	0.00
Los Angeles	2023	Annual	MDV	Diesel	Aggregated	Aggregated	10,935	433,865	51,746	0.00	18.92
Los Angeles	2023	Annual	MDV	Gasoline	Aggregated	Aggregated	951,501	36,274,737	4,402,600	1,944.85	0.00
Los Angeles	2023	Annual	MH	Diesel	Aggregated	Aggregated	5,471	56,805	547	0.00	5.69
Los Angeles	2023	Annual	MH	Gasoline	Aggregated	Aggregated	16,465	159,232	1,647	32.88	0.00
Los Angeles	2023	Annual	MHDT	Diesel	Aggregated	Aggregated	60,070	2,566,786	735,674	0.00	288.96
Los Angeles	2023	Annual	MHDT	Gasoline	Aggregated	Aggregated	15,250	833,770	305,130	163.55	0.00
Los Angeles	2023	Annual	OBUS	Diesel	Aggregated	Aggregated	2,107	170,067	27,221	0.00	24.73
Los Angeles	2023	Annual	OBUS	Gasoline	Aggregated	Aggregated	3,862	157,361	77,280	31.50	0.00
Los Angeles	2023	Annual	SBUS	Diesel	Aggregated	Aggregated	2,010	41,462	29,104	0.00	5.64
Los Angeles	2023	Annual	SBUS	Gasoline	Aggregated	Aggregated	1,386	64,114	5,545	7.17	0.00
Los Angeles	2023	Annual	UBUS	Diesel	Aggregated	Aggregated	45	7,197	180	0.00	1.18
Los Angeles	2023	Annual	UBUS	Gasoline	Aggregated	Aggregated	439	31,153	1,755	6.81	0.00
Los Angeles	2023	Annual	LDA	Plug-in Hybrid	Aggregated	Aggregated	86,566	2,058,404	357,950	75.01	0.00
Los Angeles	2023	Annual	LDT1	Plug-in Hybrid	Aggregated	Aggregated	309	7,382	1,279	0.27	0.00
Los Angeles	2023	Annual	LDT2	Plug-in Hybrid	Aggregated	Aggregated	11,316	271,382	46,790	9.96	0.00
Los Angeles	2023	Annual	MDV	Plug-in Hybrid	Aggregated	Aggregated	6,330	141,006	26,173	5.25	0.00

					MPG	Gallons Per Mile
Totals	273,930,189.78		10,903.00	1,667.71	**21.8**	0.05
Total (GAS)	259,955,950.25	0.95			**23.8**	0.04
Total (DSL)	13,974,239.53	0.05			**8.4**	0.12

Sunset Vine

All Electric Calculation

CAPCOA Consumption Rat[a]

	Natural Gas (Therm/yr/KSF)							Electricity (kWh/yr/KSF)						
Building Type	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Refrig.**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Refrig.**
Apartment Midrise	268	48	20	17	35	31		1052	350	262	365	397	560	
High Turnover (Sit Down Restaurant)	90	37	702		48	67	4	35	268	1279		3254	8965	6236

	Natural Gas (Therm/yr/DU)	Electricity (kWh/yr/DU)	
Building Type	**Pool Heat**	**Pool Heat**	**Pool Pump**
Swimming Pools	247	7410	2898

Project Energy Demand

		Natural Gas (Therm/yr/KSF)								Electricity (kWh/yr/KSF)									
Project Uses	**Amount (DU/KSF)**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Refrig.**	**Total**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Refrig.**	**Title 24 Total**	**Non-Title 24 Total**	**Total**
General Office	170	45,560	8,160	3,400	2,890	5,950	5,270	0	**71,230**	178,840	59,500	44,540	62,050	67,490	95,200	0	238,340	106,590	**344,930**
High Turnover (Sit Down Restaurant)	16.68	1,501	617	11,709	0	801	1,118	67	**15,813**	584	4,470	21,334	0	54,277	149,536	104,016	5,054	21,334	**26,388**
Total		47,061	8,777	15,109	2,890	6,751	6,388	67	**87,043**	179,424	63,970	65,874	62,050	121,767	244,736	######	243,394	127,924	371,318

		Natural Gas (Therm/yr/DU)		Electricity (kWh/yr/DU)				
Project Uses	**Amount (DU/KSF)**	**Pool Heat**		**Pool Heat**	**Pool Pump**			**Total**
Swimming Poo	3	741		22,230	8,694			**30,924**

Peak Electricity Demand Calculations

Electrical Load Factor Equation

$$f_{Load} = \frac{\text{Average load}}{\text{Maximum load in given time period}}$$

Load Factor (%)[1] **52%**

Project Electricity Demand (Operational)

Annual Demand	Baseline (Existing)	Project	Net Increase
Building (MWh)	446	1,951	1,504
Water (MWh)	44	102	58
Total (MWh)	491	2,053	1,562
Average Daily Demand			
Building (kWh)	1,223	5,345	4,122
Water (kWh)	121	279	158
Total (kWh)	1,345	5,624	4,279
Average Load			
Building (kW)	51	223	172
Water (kW)	5	12	7
Total (kW)	56	234	178

Peak Load Calculation

Peak Load (kW)	103	440	337
Systemwide Peak Load (MW)	5,820	5,820	5,820
Percent of Peak			0.006%

[1]2017 Report: System Efficiency of California's Electric Grid. California Public Utilities Comn 2017. Page 11, Figure 6. Visual estimate.

EMFAC Emission inventories for County

EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: **2024** (Construction Start Year)
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2024	HHDT	Aggregatec	Aggregatec	Diesel	0.00	1133.15
Los Angeles	2024	HHDT	Aggregatec	Aggregatec	Gasoline	0.73	0.00
Los Angeles	2024	LDA	Aggregatec	Aggregatec	Diesel	0.00	6.72
Los Angeles	2024	LDA	Aggregatec	Aggregatec	Gasoline	4681.69	0.00
Los Angeles	2024	LDT1	Aggregatec	Aggregatec	Diesel	0.00	0.11
Los Angeles	2024	LDT1	Aggregatec	Aggregatec	Gasoline	483.30	0.00
Los Angeles	2024	LDT2	Aggregatec	Aggregatec	Diesel	0.00	7.06
Los Angeles	2024	LDT2	Aggregatec	Aggregatec	Gasoline	2819.14	0.00
Los Angeles	2024	LHDT1	Aggregatec	Aggregatec	Diesel	0.00	125.04
Los Angeles	2024	LHDT1	Aggregatec	Aggregatec	Gasoline	372.61	0.00
Los Angeles	2024	LHDT2	Aggregatec	Aggregatec	Diesel	0.00	65.75
Los Angeles	2024	LHDT2	Aggregatec	Aggregatec	Gasoline	61.32	0.00
Los Angeles	2024	MCY	Aggregatec	Aggregatec	Gasoline	24.08	0.00
Los Angeles	2024	MDV	Aggregatec	Aggregatec	Diesel	0.00	18.90
Los Angeles	2024	MDV	Aggregatec	Aggregatec	Gasoline	1933.82	0.00
Los Angeles	2024	MH	Aggregatec	Aggregatec	Diesel	0.00	5.92
Los Angeles	2024	MH	Aggregatec	Aggregatec	Gasoline	32.40	0.00
Los Angeles	2024	MHDT	Aggregatec	Aggregatec	Diesel	0.00	290.83
Los Angeles	2024	MHDT	Aggregatec	Aggregatec	Gasoline	158.20	0.00
Los Angeles	2024	OBUS	Aggregatec	Aggregatec	Diesel	0.00	24.69
Los Angeles	2024	OBUS	Aggregatec	Aggregatec	Gasoline	29.68	0.00
Los Angeles	2024	SBUS	Aggregatec	Aggregatec	Diesel	0.00	5.46
Los Angeles	2024	SBUS	Aggregatec	Aggregatec	Gasoline	7.33	0.00
Los Angeles	2024	UBUS	Aggregatec	Aggregatec	Diesel	0.00	0.98
Los Angeles	2024	UBUS	Aggregatec	Aggregatec	Gasoline	6.75	0.00
Los Angeles	2024	LDA	Aggregatec	Aggregatec	Plug-in Hybrid	78.58	0.00
Los Angeles	2024	LDT1	Aggregatec	Aggregatec	Plug-in Hybrid	0.40	0.00
Los Angeles	2024	LDT2	Aggregatec	Aggregatec	Plug-in Hybrid	11.72	0.00
Los Angeles	2024	MDV	Aggregatec	Aggregatec	Plug-in Hybrid	6.42	0.00
						3,908,489,119	614,882,113
					Fuel Usage for Project Construction	104,801	193,337
					Percentage of County for Construction	0.0027%	0.031%

EMFAC Emission inventories for County

EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: **2026** (Operational Start Year)
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2026	HHDT	Aggregatec	Aggregatec	Diesel	0.00	1137.39
Los Angeles	2026	HHDT	Aggregatec	Aggregatec	Gasoline	0.60	0.00
Los Angeles	2026	LDA	Aggregatec	Aggregatec	Diesel	0.00	5.43
Los Angeles	2026	LDA	Aggregatec	Aggregatec	Gasoline	4348.93	0.00
Los Angeles	2026	LDT1	Aggregatec	Aggregatec	Diesel	0.00	0.08
Los Angeles	2026	LDT1	Aggregatec	Aggregatec	Gasoline	452.49	0.00
Los Angeles	2026	LDT2	Aggregatec	Aggregatec	Diesel	0.00	7.36
Los Angeles	2026	LDT2	Aggregatec	Aggregatec	Gasoline	2800.01	0.00
Los Angeles	2026	LHDT1	Aggregatec	Aggregatec	Diesel	0.00	134.85
Los Angeles	2026	LHDT1	Aggregatec	Aggregatec	Gasoline	358.04	0.00
Los Angeles	2026	LHDT2	Aggregatec	Aggregatec	Diesel	0.00	71.32
Los Angeles	2026	LHDT2	Aggregatec	Aggregatec	Gasoline	58.26	0.00
Los Angeles	2026	MCY	Aggregatec	Aggregatec	Gasoline	24.78	0.00
Los Angeles	2026	MDV	Aggregatec	Aggregatec	Diesel	0.00	18.51
Los Angeles	2026	MDV	Aggregatec	Aggregatec	Gasoline	1895.54	0.00
Los Angeles	2026	MH	Aggregatec	Aggregatec	Diesel	0.00	6.30
Los Angeles	2026	MH	Aggregatec	Aggregatec	Gasoline	31.54	0.00
Los Angeles	2026	MHDT	Aggregatec	Aggregatec	Diesel	0.00	291.63
Los Angeles	2026	MHDT	Aggregatec	Aggregatec	Gasoline	147.17	0.00
Los Angeles	2026	OBUS	Aggregatec	Aggregatec	Diesel	0.00	24.28
Los Angeles	2026	OBUS	Aggregatec	Aggregatec	Gasoline	26.17	0.00
Los Angeles	2026	SBUS	Aggregatec	Aggregatec	Diesel	0.00	5.06
Los Angeles	2026	SBUS	Aggregatec	Aggregatec	Gasoline	7.54	0.00
Los Angeles	2026	UBUS	Aggregatec	Aggregatec	Diesel	0.00	0.93
Los Angeles	2026	UBUS	Aggregatec	Aggregatec	Gasoline	6.65	0.00
Los Angeles	2026	LDA	Aggregatec	Aggregatec	Plug-in Hybrid	82.30	0.00
Los Angeles	2026	LDT1	Aggregatec	Aggregatec	Plug-in Hybrid	0.70	0.00
Los Angeles	2026	LDT2	Aggregatec	Aggregatec	Plug-in Hybrid	14.79	0.00
Los Angeles	2026	MDV	Aggregatec	Aggregatec	Plug-in Hybrid	8.49	0.00

	3,707,562,992	621,640,500
Net Fuel Usage for Project Operation	70,356	11,674
Percentage of County for Operation	0.0019%	0.0019%