



**CSU Sacramento State Master Plan
Net Zero Energy Plan**
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Assumptions
Existing buildings to be renovated do not see improvements until renovations
New buildings do not see continued improvements after they are built
Solar electricity production per kW of installed capacity **1413 kWh/kW/yr**

EUI TARGETS BY BUILDING TYPE

	NEW	EUI TARGETS BY BUILDING TYPE				
		2015	2020	2025	2030	2035
ACADEMIC/HOUSING	Academic/Housing	40	30	20	20	20
	Science	60	50	50	40	40
	Food Service	200	175	150	125	100
	Parking	15	15	10	10	10
RENOVATED	Academic/Housing	2015	2020	2025	2030	2035
	Academic/Housing	60	55	50	45	40
	Science	60	50	50	40	40
	Food Service	n/a	n/a	n/a	n/a	n/a
EXISTING	Academic/Housing	2015	2020	2025	2030	2035
	Academic/Housing	60	55	50	45	40
	Science	n/a	n/a	n/a	n/a	n/a
	Food Service	300	250	200	150	150
DEMOLISHED	Academic/Housing	2015	2020	2025	2030	2035
	Academic/Housing	60	55	50	45	40
	Science	n/a	n/a	n/a	n/a	n/a
	Food Service	300	250	200	150	150

BUILDING SUMMARY			CHANGE SUMMARY		AREA SUMMARY (GSF)						ENERGY SUMMARY (KBTU/YR)								
Code	Building Name	GSF	EUI	Energy (kBTU/yr)	Group	Change - Building Type	GSF Change	Today	2015	2020	2025	2030	2035	2015	2020	2025	2030	2035	
AH	University Union	162,268	70.5	11,439,894	Group 1	New - Student Activ. Exp.	35,000	162,268	162,268	162,268	162,268	162,268	162,268	11,439,894	5,918,040	5,918,040	5,918,040	5,918,040	5,918,040
AH	Well	150,845	58.0	8,749,010	Group 2	New - Student Activ. Exp.	22,500	150,845	150,845	150,845	150,845	150,845	150,845	8,749,010	5,200,350	5,200,350	5,200,350	5,200,350	5,200,350
AH	NEW	-	-	-	Group 3	New - Office Parking Svcs.	22,050	-	22,050	22,050	22,050	22,050	22,050	-	661,500	661,500	661,500	661,500	661,500
P	NEW	-	-	-	Group 3	New - Parking Structure 5	555,950	-	555,950	555,950	555,950	555,950	555,950	-	8,339,250	8,339,250	8,339,250	8,339,250	8,339,250
AH	Public Service Bldg	10,603	60.2	638,301	Group 3	Demo - Public Svcs. Bldg	-10,603	10,603	10,603	10,603	10,603	10,603	10,603	638,301	10,200,000	10,200,000	10,200,000	10,200,000	10,200,000
S	NEW	-	-	-	Group 4	New - Acad. Sci. Bldg	204,000	-	204,000	204,000	204,000	204,000	204,000	-	10,200,000	10,200,000	10,200,000	10,200,000	10,200,000
AH	Sageola	191,137	61.3	11,716,698	Group 4	Renov - Lab into Office & Lab	191,137	191,137	191,137	191,137	191,137	191,137	191,137	11,716,698	11,716,698	9,556,850	9,556,850	9,556,850	9,556,850
S	Placer	67,101	121.3	8,139,351	Group 4	Renov - Lab into Office & Lab	67,101	67,101	67,101	67,101	67,101	67,101	67,101	8,139,351	11,139,351	3,355,050	3,355,050	3,355,050	3,355,050
S	Humboldt	24,908	61.3	1,526,860	Group 4	Demo - Acad. Sci.	-24,908	24,908	24,908	24,908	24,908	24,908	24,908	1,526,860	-	-	-	-	-
S	Alpine	30,336	61.3	1,859,597	Group 4	Demo - Acad. Sci.	-30,336	30,336	30,336	30,336	30,336	30,336	30,336	1,859,597	-	-	-	-	-
S	Brighton	28,956	60.2	1,743,151	Group 4	Demo - Acad. Sci. Bldg.	-28,956	28,956	28,956	28,956	28,956	28,956	28,956	1,743,151	-	-	-	-	-
AH	Douglass	18,796	61.3	1,152,195	Group 4	Demo - Acad. Bldg.	-18,796	18,796	18,796	18,796	18,796	18,796	18,796	1,152,195	-	-	-	-	-
AH	Calaveras	18,820	61.3	1,153,666	Group 4	Demo - Acad. Bldg.	-18,820	18,820	18,820	18,820	18,820	18,820	18,820	1,153,666	-	-	-	-	-
AH	Santa Clara	62,813	61.3	3,850,437	Group 4	Demo - Acad. Bldg.	-62,813	62,813	62,813	62,813	62,813	62,813	62,813	3,850,437	-	-	-	-	-
S	NEW	-	-	-	Group 4	New - Engineering Bldg.	17,500	-	17,500	17,500	17,500	17,500	17,500	-	875,000	875,000	875,000	875,000	875,000
AH	Library	377,074	61.3	23,114,636	Group 5	Renov - Library	377,074	377,074	377,074	377,074	377,074	377,074	377,074	23,114,636	23,114,636	18,853,700	18,853,700	18,853,700	18,853,700
AH	NEW	-	-	-	Group 6	New - Acad. Arts	36,000	-	36,000	36,000	36,000	36,000	36,000	-	720,000	720,000	720,000	720,000	720,000
AH	Shasta Hall	62,667	61.3	3,841,487	Group 6	Renovation - Acad.	62,667	62,667	62,667	62,667	62,667	62,667	62,667	3,841,487	3,841,487	2,820,015	2,820,015	2,820,015	2,820,015
AH	Capistrano Hall	84,722	61.3	5,193,459	Group 6	Renovation - Acad.	84,722	84,722	84,722	84,722	84,722	84,722	84,722	5,193,459	5,193,459	3,812,490	3,812,490	3,812,490	3,812,490
AH	NEW	-	-	-	Group 7	New - Acad. Student Svcs	44,340	-	44,340	44,340	44,340	44,340	44,340	-	886,800	886,800	886,800	886,800	886,800
AH	Sacramento	35,180	60.2	2,117,836	Group 7	Renov - Acad. Bldg.	-35,180	35,180	35,180	35,180	35,180	35,180	35,180	2,117,836	2,117,836	2,117,836	2,117,836	2,117,836	2,117,836
AH	Lassen	80,445	61.3	4,931,279	Group 7	Renov - Acad. Bldg.	-80,445	80,445	80,445	80,445	80,445	80,445	80,445	4,931,279	4,931,279	4,931,279	4,931,279	4,931,279	4,931,279
AH	Kadema	40,483	61.3	2,481,608	Group 7	Demo - Acad. Bldg.	-40,483	40,483	40,483	40,483	40,483	40,483	40,483	2,481,608	2,481,608	2,481,608	2,481,608	2,481,608	2,481,608
AH	Eureka Hall	59,488	61.3	3,646,614	Group 7	Renov - Acad. Bldg.	-59,488	59,488	59,488	59,488	59,488	59,488	59,488	3,646,614	3,646,614	3,646,614	3,646,614	3,646,614	3,646,614
AH	Amador Hall	67,138	61.3	4,115,559	Group 7	Renov - Acad. Bldg.	-67,138	67,138	67,138	67,138	67,138	67,138	67,138	4,115,559	4,115,559	4,115,559	4,115,559	4,115,559	4,115,559
AH	NEW	-	-	-	Group 8	New - Housing A	48,000	-	48,000	48,000	48,000	48,000	48,000	-	1,440,000	1,440,000	1,440,000	1,440,000	1,440,000
AH	NEW	-	-	-	Group 8	New - Housing B	60,000	-	60,000	60,000	60,000	60,000	60,000	-	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
AH	NEW	-	-	-	Group 8	New - Housing C	100,000	-	100,000	100,000	100,000	100,000	100,000	-	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
AH	Sutter	36,537	61.3	2,239,718	Group 8	Demo - Housing	-36,537	36,537	36,537	36,537	36,537	36,537	36,537	2,239,718	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
P	NEW	-	-	-	Group 8	New - Parking	188,000	-	188,000	188,000	188,000	188,000	188,000	-	1,880,000	1,880,000	1,880,000	1,880,000	1,880,000
F	NEW	-	-	-	Group 8	Renov - Dining Hall Expansion	20,000	-	20,000	20,000	20,000	20,000	20,000	-	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
AH	NEW	-	-	-	Group 8	New - Housing	60,000	-	60,000	60,000	60,000	60,000	60,000	-	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
AH	NEW	-	-	-	Group 8	New - Housing	30,000	-	30,000	30,000	30,000	30,000	30,000	-	600,000	600,000	600,000	600,000	600,000
AH	Desmond	48,871	61.3	2,995,792	Group 8	Demo - Housing	-48,871	48,871	48,871	48,871	48,871	48,871	48,871	2,995,792	2,995,792	2,995,792	2,995,792	2,995,792	2,995,792
AH	NEW	-	-	-	Group 8	New - Housing	100,000	-	100,000	100,000	100,000	100,000	100,000	-	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
AH	Jenkins	38,212	61.3	2,342,396	Group 8	Demo - Housing	-38,212	38,212	38,212	38,212	38,212	38,212	38,212	2,342,396	2,342,396	2,342,396	2,342,396	2,342,396	2,342,396
AH	NEW	-	-	-	Group 8	New - Housing	60,000	-	60,000	60,000	60,000	60,000	60,000	-	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
AH	Draper	32,072	61.3	1,966,014	Group 8	Demo - Housing	-32,072	32,072	32,072	32,072	32,072	32,072	32,072	1,966,014	1,966,014	1,966,014	1,966,014	1,966,014	1,966,014
AH	NEW	-	-	-	Group 8	New - Housing	90,000	-	90,000	90,000	90,000	90,000	90,000	-	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000
AH	Sierra	38,086	61.3	2,334,672	Group 8	Demo - Housing	-38,086	38,086	38,086	38,086	38,086	38,086	38,086	2,334,672	2,334,672	2,334,672	2,334,672	2,334,672	2,334,672
AH	NEW	-	-	-	Group 8	New - Housing	60,000	-	60,000	60,000	60,000	60,000	60,000	-	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
AH	NEW	-	-	-	Group 9	New - Children's Center	15,780	-	15,780	15,780	15,780	15,780	15,780	-	315,600	315,600	315,600	315,600	315,600
AH	Children Center	11,054	65.2	499,641	Group 9	Demo - Children's Center	-11,054	11,054	11,054	11,054	11,054	11,054	11,054	499,641	499,641	499,641	499,641	499,641	499,641
AH	El Dorado	11,898	60.2	716,260	Group 9	Demo - Housing	-11,898	11,898	11,898	11,898	11,898	11,898	11,898	716,260	716,260	716,260	716,260	716,260	716,260
AH	Art Sculpture Lab	15,132	61.3	927,592	Group 9	Demo - Art Lab	-15,132	15,132	15,132	15,132	15,132	15,132	15,132	927,592	927,592	927,592	927,592	927,592	927,592
AH	NEW	-	-	-	Group 9	New - Housing	104,000	-	104,000	104,000	104,000	104,000	104,000	-	2,080,000	2,080,000	2,080,000	2,080,000	2,080,000
AH	NEW	-	-																