

## Solar PV Projects at Colorado State University

Updated 9/27/2022

	Project	Size [kWDC]	Annual Output [kWh]	GHG Reductions [kg CO <sub>2</sub> E]	Mounting	Tilt Angle	Owner	Date Installed/Online	REC Ownership	Panels			Inverters			Designed & Installed
										Manufacturer	Rating [W]	Number of Panels	Manufacturer	Rating [kW]	Number of Inverters	
1	Chrisman Field - Phase 1	2,000	3,500,000	1,750,000	Single Axis tracking	multi	EDP Renewables	12/31/2009	Xcel Energy	Trina	230	8,697	Advanced Energy	500 & 333	4	AMEC
1	Chrisman Field - Phase 2	3,300	5,000,000	2,500,000	Fixed Tilt	25	EDP Renewables	12/31/2010	Xcel Energy	Trina	230	14,352	Advanced Energy	500	6	GES
<b>Subtotal Chrisman Field</b>		<b>5,300</b>	<b>8,500,000</b>	<b>4,250,000</b>								<b>23,049</b>		<b>4,833</b>	<b>10</b>	
2	Engineering Building	18.90	27,000	13,500	Fixed Tilt	40	CSU	6/17/2009	CSU	BP Solar	175	108	SMA Sunny Boy	7	3	Bella Energy
3	Academic Village, Thermal Plant	12.60	18,000	9,000	Fixed Tilt	40	CSU	8/14/2009	CSU	Sharp	175	72	SMA Sunny Boy	6	2	Bella Energy
4	Behavioral Sciences Building	15.75	23,000	11,500	Fixed Tilt	40	CSU	5/1/2010	CSU	BP Solar	175	90	SMA Sunny Boy	6	3	Bella Energy
5	Lake Street Parking Garage	132.54	174,500	87,300	Fixed Tilt	10	CSU	5/1/2010	CSU	Sharp	235	564	Satcon PowerGate	135	1	Bella Energy
6	Morgan Library, Study Cube	4.32	5,900	3,000	Fixed Tilt	15	CSU	4/1/2012	CSU	Phono Solar	240	18	SMA Sunny Boy	3	1	Merit Electric
7	Powerhouse Energy Campus	21.60	28,442	14,200	Fixed Tilt	15	CSU	11/1/2013	CSU	Yingli Solar	240	90	Power One PV1-10.0-1	10	2	Collins Control
8	Braiden Hall	99.96	133,700	66,900	Fixed Tilt	multi	Solaris	11/1/2014	Fort Collins Utilities	ReneSola	255	392	Advanced Energy	23 (2), 16 (1), 12(2)	5	Namaste
9	Student Recreation Center	544.73	717,278	358,600	Fixed Tilt	12	Solaris	3/17/2015	Fort Collins Utilities	Trina	305	1,786	Advanced Energy	23 (18), 20 (1)	19	Namaste
10	Parmelee Hall	139.08	183,135	91,600	Fixed Tilt	multi	Solaris	4/22/2015	Fort Collins Utilities	Trina	305	456	Advanced Energy	23(4), 20(1)	5	Namaste
11	University Center for the Arts	98.52	129,721	64,900	Fixed Tilt	12	Solaris	6/2/2015	Fort Collins Utilities	Trina	305	323	SMA	24(1), 20(3)	4	Namaste
12	Veterinary Teaching Hospital	220.21	289,964	145,000	Fixed Tilt	12	Solaris	6/3/2015	Fort Collins Utilities	Trina	305	722	SMA	24(6), 20(2)	8	Namaste
13	Edwards Hall	91.81	120,885	60,400	Fixed Tilt	12	Solaris	6/18/2015	Fort Collins Utilities	Trina	305	301	SMA	24(1), 20(2), 15(1)	4	Namaste
14	Student Recreation Center - Spotlight Solar Curve	1.71	2,252	1,100	Fixed Tilt		CSU	8/15/2018	CSU	Lumos	285	6	Fronius	1.5	1	Microgrid
15	Arkansas Valley Research Center - Rocky Ford	12	19,719	9,900	Fixed Tilt	20	CSU	5/1/2019	CSU	Mission Solar	305	41	Solar Edge	14.4	1	T&T Electric
16	Western Colorado Research Center - Orchard Mesa (Classroom/Office Building)	14.8	23,641	11,800	Fixed Tilt		CSU	5/1/2019	CSU	SunPower	435	34	Solar Edge	20	1	High Noon Solar
17	Western Colorado Research Center - Orchard Mesa (Veterinary Diagnostic Lab)	14.8	23,641	11,800	Fixed Tilt		CSU	5/1/2019	CSU	SunPower	435	34	Solar Edge	20	1	High Noon Solar
18	Facilities Management North, Bike Shelter	4.2	5,770	2,900	Fixed Tilt	10	CSU	7/3/2019	CSU	Solaria	350	12	Enphase	0.3	12	Sandbox Solar
19	ARDEC, agrivoltaics research	8.2	14,457	7,200	Fixed Tilt w/ manual adj.	35	CSU	4/1/2020	CSU	Jinko & Longi	325 & 360	24	Solar Edge	11.4	1	Sandbox Solar
20	Lory Student Center	80	110,500	55,300	Fixed Tilt	10	CSU	1/7/2021	CSU	Trina	400	200	SMA	25	3	EnergyLink
21	CSU Mountain Campus	18.9	27,000	13,500	Fixed Tilt	14	CSU	Q1 2022	CSU	Longi	370	51	Solar Edge	20	1	Sandbox Solar

Continued on next page

21	CSU Mountain Campus	18.9	27,000	13,500	Fixed Tilt	14	CSU	Q1 2022	CSU	Longi	370	51	Solar Edge	20	1	Sandbox Solar
22	Laurel Village - Alpine	136.0	182,920	91,500	Fixed Tilt	20	Solaris	Q2 2021	CSU	Boviet	400	340	CPS	50, 60	2	Namaste
23	Laurel Village - Pinon	170.0	218,790	109,400	Fixed Tilt	20	Solaris	Q2 2021	CSU	Boviet	400	425	CPS	60	2	Namaste
24	Corbett Hall, center section	122.4	174,910	87,500	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	306	CPS	50	2	Namaste
25	Smith Natural Resources	170.0	239,360	119,700	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	425	CPS	60	2	Namaste
26	Johnson Family Equine Hospital	544.0	754,200	377,100	Fixed Tilt		Solaris	Q2 2021	CSU	Boviet	400	1,360	CPS	50,60	8	Namaste
27	Richardson Design Center	61.2	87,390	43,700	Fixed Tilt	10	Solaris	Q3 2021	CSU	Boviet	400	153	CPS	50	1	Namaste
28	Global Foods Innovation Center - Animal Science Addition	231.2	305,420	152,700	Fixed Tilt	2	Solaris	Q4 2021	CSU	Boviet	400	578	CPS	60	3	Namaste
29	South College Avenue Parking Garage	238.8	310,680	155,300	Fixed Tilt	2	Solaris	Q2 2021	CSU	Boviet	400	597	CPS	50	4	Namaste
30	Ingersoll Hall, center section	61.2	87,580	43,800	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	153	CPS	50	1	Namaste
31	Translational Medicine Institute & Equine Performance Analysis Facility	266.8	360,710	180,400	Fixed Tilt		Solaris	Q1 2022	CSU	Boviet	400	667	CPS	50,60	3	Namaste
32	ARDEC, ground mount array	360.4	588,170	294,100	Fixed Tilt	25	Solaris	9/17/2022	CSU	Boviet	400	901	CPS	60	5	Namaste

<b>Subtotal - COMPLETED w/o Chrisman</b>		<b>3,917</b>	<b>5,388,634</b>	<b>2,694,600</b>								<b>11,229</b>			<b>111</b>	
<b>Subtotal - COMPLETED</b>		<b>9,217</b>	<b>13,888,634</b>	<b>6,944,600</b>								<b>34,278</b>			<b>121</b>	
<b>Subtotal - CSU Owned</b>		<b>2,722</b>	<b>3,813,952</b>	<b>1,907,200</b>								<b>7,249</b>			<b>66</b>	

													Panels		Inverters			
	Pending Projects (currently under construction)	Size [kWDC]	Annual Output [kWh]	GHG Reductions [kg CO <sub>2</sub> e]	Mounting	Tilt Angle	Owner	Date Started	REC Ownership	Manufacturer	Rating [W]	Number of Panels	Manufacturer	Rating [kW]	Number of Inverters	Designed & Installed		
33	Parmelee Hall, south wings	61.2	89,110	44,600	Fixed Tilt		Solaris	Q4 2021	CSU	Boviet	400	153	CPS	50	1	Namaste		
34	NRRRC B	190.4	273,030	136,500	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	476	CPS	60	3	Namaste		
35	NRRRC D	68.0	97,100	48,600	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	170	CPS	60	1	Namaste		
36	Health & Medical Center	176.8	247,490	123,700	Fixed Tilt	10	Solaris	Q4 2021	CSU	Boviet	400	442	CPS	50	3	Namaste		
37	Aggie Village Apartments - Cottonwood	446.0	573,110	286,600	Fixed Tilt		Solaris	Q2 2022	CSU	Boviet	400	1,115	CPS	50	6	Namaste		
38	Aggie Village Apartments - Lodgepole	210.8	270,460	135,200	Fixed Tilt		Solaris	Q2 2022	CSU	Boviet	400	527	CPS	60	3	Namaste		
39	Aggie Village Apartments - Walnut	190.4	260,470	130,200	Fixed Tilt		Solaris	Q2 2022	CSU	Boviet	400	476	CPS	50	3	Namaste		
40	Aggie Labs, ground mount array	392.0	638,530	319,300	Fixed Tilt	25	Solaris	Q3 2022	CSU	Boviet	400	980	CPS	60	5	Namaste		
41	Foothills Campus Chill Plant, ground mount array	153.6	199,680	99,800	Fixed Tilt	25	Solaris	Q3 2022	CSU	Boviet	400	384	CPS	60	2	Namaste		
42	Vida Building - SPUR Campus	113	167,000	83,500	Fixed Tilt	10	CSU	Q1 2022	CSU	Longi	445	255	CPS	60,25	2	Namaste		
43	Hydro Building - SPUR Campus	46	57,400	28,700	Fixed Tilt	10	CSU	Q4 2022	CSU	AstroEnergy	450	102	CPS	36	1	Namaste		

<b>Subtotal - PENDING</b>		<b>2,049</b>	<b>2,873,380</b>	<b>1,436,700</b>								<b>5,080</b>			<b>30</b>	
---------------------------	--	--------------	------------------	------------------	--	--	--	--	--	--	--	--------------	--	--	-----------	--

<b>Grand Total (completed &amp; pending)</b>		<b>11,265</b>	<b>16,762,014</b>	<b>8,381,300</b>								<b>39,358</b>			<b>151</b>	
--	--	---------------	-------------------	------------------	--	--	--	--	--	--	--	---------------	--	--	------------	--

kW DC = Kilowatts of Direct Current Power

W = Watts

kW = Kilowatts (1,000 Watts)

kWh = Kilowatt Hours; a kilowatt hour is a measure of electricity use; an average home in Fort Collins uses 750 kWh every month

kg CO<sub>2</sub>e = Kilograms of Carbon Dioxide Equivalent; the amount of CO<sub>2</sub> which would have the equivalent global warming impact