

Energize Fresno Project Savings Results

Project Information				Baseline Information					
Project Number	Build Type	Planning Area	Project Type	Annual Electricity Consumption (kWh/yr)	Annual Peak Demand (kW)	Annual Gas Consumption (therms/yr)	Total Utility Bill (\$/yr)	Utility Bill - Electricity Component (\$/yr)	Utility Bill - Demand Charge (\$/yr)
1	Major Renovation	Downtown	Office Building	1,221,407	269	1,496	\$245,980	\$195,963	\$48,259
2	Major Renovation	Downtown	Mixed Use Commercial	2,358,939	419	28,590	\$514,300	\$407,746	\$76,175
3	New Construction	Downtown	Multi-Family Residential	767,892	184	5	\$192,070	\$159,158	\$31,231
4	Major Renovation	Downtown	Mixed Use Commercial	1,136,172	190	18,552	\$240,900	\$188,190	\$33,963
5	Major Renovation	Downtown	Mixed Use Commercial	617,367	132	952	\$125,000	\$99,523	\$24,369
6	New Construction	Downtown	Office Building	1,090,542	240	1,336	\$219,620	\$174,967	\$43,089
7	Major Renovation	Downtown	Office Building	872,433	192	1,069	\$175,700	\$139,974	\$34,471
8	Major Renovation	Downtown	Office Building	947,489	245	4,977	\$202,150	\$156,178	\$40,794
9	Major Renovation	Downtown	Mixed Use Commercial	514,831	146	2,593	\$109,730	\$84,468	\$22,567
10	Major Renovation	Downtown	Office Building	406,900	102	2,234	\$82,841	\$42,836	\$37,664
11	Retrofit	Downtown	Office Building	660,364	141	867	\$132,320	\$105,959	\$25,347
12	Major Renovation	Blackstone	Mixed Use Commercial	1,013,289	165	17,506	\$245,100	\$183,754	\$34,490
13	New Construction	Blackstone	Mixed Use Commercial	2,732,914	473	25,652	\$557,378	\$439,632	\$88,790
14	New Construction	Blackstone	College Campus	849,314	241	5,033	\$204,250	\$151,442	\$43,861
15	Retrofit	Blackstone	College Campus	10,483,860	3,303	96,419	\$2,236,370	\$983,637	\$1,103,831
16	Retrofit	Downtown	Municipal	10,662,898	2,415	189,177	\$2,239,710	\$1,396,091	\$519,697
				36,336,609	8,858	396,459	7,723,419	4,909,518	2,208,598

Project Number	Electricity Savings (Cumulative)					Demand Reduction (Cumulative)				
	EE L1	EE L2	Distributed Generation	Demand Management	Percentage	EE L1	EE L2	Distributed Generation	Demand Management	Percentage
1	117,000	275,461	500,745	500,745	41%	33	67	116	140	43%
2	145,886	497,319	797,661	797,661	34%	29	85	110	172	26%
3	79,786	175,669	484,838	484,838	63%	19	33	33	55	18%
4	43,586	232,427	445,726	445,726	39%	7	34	49	78	26%
5	39,986	129,712	393,070	393,070	64%	11	31	51	73	38%
6	104,464	245,947	540,903	540,903	50%	30	60	111	148	46%
7	83,571	196,758	281,767	281,767	32%	24	48	67	71	35%
8	110,133	277,219	771,241	771,241	81%	26	73	101	122	41%
9	53,697	141,238	423,340	423,340	82%	13	39	70	71	48%
10	57,917	96,412	222,108	222,108	55%	14	24	55	71	53%
11	56,761	138,510	364,665	364,665	55%	16	33	61	81	43%
12	58,297	157,997	157,997	872,813	86%	14	25	26	58	15%
13	160,640	533,917	946,593	946,593	35%	34	100	124	185	26%
14	118,136	137,264	737,175	737,175	87%	24	33	117	170	48%
15	980,156	1,676,417	5,580,441	5,580,441	53%	326	1,308	2,046	2,420	62%
16	1,108,807	1,161,386	10,628,781	10,628,781	100%	224	248	1,186	1,242	49%
	3,318,824	6,073,651	23,277,051	23,991,867	10	843	2,241	4,321	5,158	6

Project Number	Cost Savings (Cumulative)					Incremental Measure Cost					
	EE L1	EE L2	Distributed Generation	Demand Management	Total	EE L1	EE L2	Distributed Generation	Demand Management	Total	Payback Time
1	\$23,900	\$54,000	\$88,800	\$92,300	\$92,300	\$18,600	\$133,700	\$286,100	\$-	\$438,400	4.75
2	\$27,800	\$92,000	\$140,800	\$148,400	\$148,400	\$14,000	\$91,000	\$379,800	\$-	\$484,800	3.27
3	\$15,900	\$34,200	\$76,200	\$80,400	\$80,400	\$14,100	\$124,900	\$394,700	\$-	\$533,700	6.64
4	\$8,200	\$39,800	\$74,100	\$78,300	\$78,300	\$15,700	\$42,500	\$266,000	\$-	\$324,200	4.14
5	\$8,300	\$25,400	\$60,700	\$63,500	\$63,500	\$10,900	\$82,400	\$334,500	\$-	\$427,800	6.74
6	\$21,300	\$48,200	\$93,500	\$97,900	\$97,900	\$16,600	\$119,400	\$372,600	\$-	\$508,600	5.20
7	\$17,100	\$38,600	\$51,700	\$54,300	\$54,300	\$16,600	\$95,500	\$108,000	\$-	\$220,100	4.05
8	\$23,700	\$56,900	\$113,700	\$119,700	\$119,700	\$12,300	\$34,400	\$573,600	\$-	\$620,300	5.18
9	\$11,100	\$28,400	\$59,600	\$61,400	\$61,400	\$6,700	\$18,000	\$327,700	\$-	\$352,400	5.74
10	\$10,436	\$16,127	\$26,428	\$36,500	\$36,500	\$20,800	\$142,300	\$158,600	\$-	\$321,700	8.81
11	\$11,700	\$26,900	\$60,200	\$63,000	\$63,000	\$26,000	\$73,400	\$287,200	\$-	\$386,600	6.14
12	\$12,400	\$31,500	\$128,100	\$142,800	\$142,800	\$8,400	\$71,200	\$907,900	\$-	\$987,500	6.92
13	\$31,750	\$105,170	\$533,079	\$543,429	\$543,429	\$27,573	\$242,232	\$1,562,356	\$-	\$1,832,161	3.37
14	\$25,300	\$31,000	\$115,000	\$121,700	\$121,700	\$9,800	\$89,400	\$744,100	\$-	\$1,113,300	9.15
15	\$188,500	\$482,000	\$1,126,000	\$1,193,000	\$1,193,000	\$-	\$2,775,000	\$-	\$-	\$2,522,936	3.85
16	\$188,900	\$228,300	\$798,700	\$877,600	\$877,600	\$2,077,800	\$34,261	\$11,910,300	\$-	\$14,022,361	15.98
	626,286	1,338,497	3,546,607	3,774,229	3,774,229	2,295,873	4,169,593	18,613,456	-	25,096,858	

	Full Measure Cost			
Project Number	LED Lighting	HVAC System	Distributed Generation	Demand Management
1	\$49,600	\$2,430,909	\$286,100	\$-
2	\$37,333	\$1,654,545	\$379,800	\$-
3	\$37,600	\$2,270,909	\$394,700	\$-
4	\$41,867	\$772,727	\$266,000	\$-
5	\$29,067	\$1,498,182	\$334,500	\$-
6	\$44,267	\$2,170,909	\$372,600	\$-
7	\$44,267	\$1,736,364	\$108,000	\$-
8	\$32,800	\$625,455	\$573,600	\$-
9	\$17,867	\$327,273	\$327,700	\$-
10	\$55,467	\$2,587,273	\$158,600	\$-
11	\$69,333	\$1,334,545	\$287,200	\$-
12	\$22,400	\$1,294,545	\$907,900	\$-
13	\$73,528	\$4,404,219	\$1,562,356	\$-
14	\$27,374	\$1,625,455	\$744,100	\$-
15	\$-	\$11,041,875	\$-	\$-
16	\$5,540,800	\$622,926	\$11,910,300	\$-
	6,123,569	36,398,110	18,613,456	-
	Full Measure Cost Scaling Factors			
	Lighting	0.375		
	HVAC	0.055		

	GHG Emissions				
Project Number	Baseline GHG Emissions (MT CO2e / yr)	EE L1 GHG Emissions Reduction (MT CO2e / yr)	EE L2 GHG Emission Reduction (MT CO2e / yr)	Distributed Generation GHG Emission Reduction (MT CO2e / yr)	Demand Management GHG Emissions Reduction (MT CO2e / yr)
1	249	23.1	54.7	99.1	99.1
2	617	28.8	102.1	161.3	161.3
3	152	15.7	34.7	95.7	95.7
4	323	8.6	51.4	93.5	93.5
5	127	7.9	25.8	77.8	77.8
6	222	20.6	48.8	107.0	107.0
7	178	16.5	39.1	55.8	55.8
8	213	19.8	53.9	151.4	151.4
9	115	9.3	27.1	82.8	82.8
10	92	0.1	10.5	35.2	35.2
11	135	11.2	27.5	72.1	72.1
12	293	11.5	32.1	32.1	173.2
13	675	31.7	108.1	189.5	189.5
14	194	22.9	27.2	145.6	145.6
15	2581	194.3	324.2	1,094.5	1,094.5
16	3109	209.2	284.8	2,151.0	2,151.0
	9,275	631	1,252	4,645	4,786

	Natural Gas Savings (Cumulative)				EMS Savings				Electricity Savings Percentages			
Project Number	EE L1	EE L2	Distributed Generation	Demand Management	Electricity Savings Factor (%)	Gas Savings Factor (%)	Electricity Savings (kWh)	Gas Savings (therms)	EE L2	Distributed Generation	Weighting Factor - Dev Sites	Weighting Factor - Activity Centers
1	-	64	64	64	1.97%	4.3%	21,725	64	23%	18%	0.0852	0
2	-	739	739	739	1.38%	2.6%	30,461	739	21%	13%	0.1645	0
3	-	0	0	0	0.68%	1.9%	4,672	0	23%	40%	0.0535	0
4	-	1,047	1,047	1,047	2.48%	5.6%	27,146	1,047	20%	19%	0.0792	0
5	-	45	45	45	2.08%	4.7%	12,006	45	21%	43%	0.0431	0
6	-	57	57	57	1.97%	4.3%	19,397	57	23%	27%	0.0760	0
7	-	46	46	46	1.97%	4.3%	15,518	46	23%	10%	0.0608	0
8	(358)	(145)	(145)	(145)	1.97%	4.3%	16,472	213	29%	52%	0.0661	0
9	(246)	(135)	(135)	(135)	1.97%	4.3%	9,071	111	27%	55%	0.0359	0
10	(2,140)	(1,609)	(1,619)	(1,619)	1.97%	4.3%	6,865	96	24%	31%	0.0284	0
11	-	37	37	37	1.97%	4.3%	11,874	37	21%	34%	0.0460	0
12	-	182	182	182	0.42%	1.0%	4,033	182	16%	0%	0.0707	0
13	-	509	509	509	0.70%	2.0%	18,101	509	20%	15%	0.1906	0
14	(75)	26	25	25	0.00%	0.0%	-	-	16%	71%	0	0.0386
15	170	(1,242)	(1,242)	(1,242)	0.00%	0.0%	-	-	16%	37%	0	0.4766
16	(1,806)	10,471	10,131	10,131	0.00%	0.0%	-	-	11%	89%	0	0.4848
	(4,455)	10,092	9,741	9,741					17%	47%	0	
									Weighted Avg Savings % - EE L2		22%	14%
									Weighted Avg Savings % - DG		23%	64%