

Example Cost Comparison For Just Two Lights



Immediate Payback of Off Grid vs. Utility Powered Street Lights (Reference: Residential Subdivision Entrance, Chicago Suburb)				
Solution Type	Utility Connected (2 poles)	Off Grid Single Solar (2 Poles)	Off Grid Dual Solar (2 Poles)	Off Grid Hybrid, Wind and Solar (2 Poles)
Pole and LED Light @ \$2,000/pole	\$4,000.00	\$4,000.00	\$4,000.00	\$4,000.00
Installation	\$2,000.00	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00
Distribution Panel with System Controller with Smart Grid Technology	\$7,000.00	Not required	Not required	Not required
Concrete Pad	\$800.00	Not required	Not required	Not required
Trenching (250 fee @ \$20.00/ foot x 2)	\$10,000	Not required	Not required	Not required
Conduit and Copper Wire at \$15/ foot x 2 installed	\$7,500.00	Not required	Not required	Not required
Off Grid Components, batteries, solar panel, arms, smart controller, wiring harness, 5 years of monitoring	Not Applicable	\$7,300.00	\$8,700.00	\$10,500.00
Total - Hardware and Installation	\$31,300.00	\$12,300.00 \$19,000.00 Lower	\$13,700.00 \$17,600.00 Lower	\$18,700.00 \$12,600.00 Lower
Maintenance on lights and ballast over 5 years	\$800.00	\$800.00	\$800.00	\$800.00
Battery Replacement Cost: Average life of batteries is 5-7 years worst case is to replace once at a cost of \$450 per pole x 2 poles = \$900.00	Not Applicable	\$900.00	\$900.00	\$900.00
Electricity costs over 10 years at average cost of 14 cents/kwh and usage of 352kwh/ year = \$246.50 x2 poles = \$493.00	\$493.00	\$0.00	\$0.00	\$0.00
Total Maintenance Cost	\$1,293.20	\$1,700.00	\$1,700.00	\$1,700.00
Total – Installation and Maintenance Over 5 Years	\$32,593.00	\$13,600.00	\$15,000.00	\$20,400.00

When all the costs are totaled the advantage becomes very clear