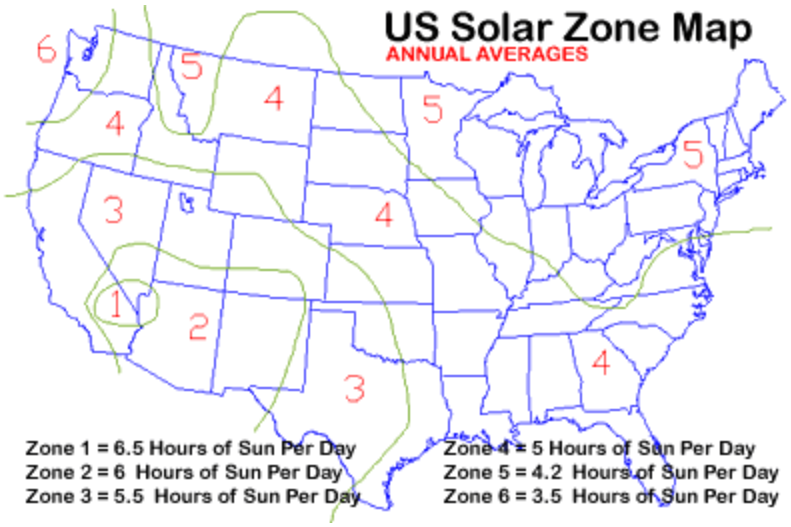
Welcome!

WIND POWER
SOLAR POWER
ABOUT WCAP
INVERTERS
HOME PAGE

Photovoltaics is the science of converting sunlight directly into electrical energy. The energy created is direct current and can be used that way, stored for later use, or converted to alternating current. The simplest form of a photovoltaic device is a solar powered battery whose only consumable is the light that powers it. It has no moving parts, hence, nothing to wear out, provided the device is correctly encapsulated. Because sunlight is universally available, PV devices can be used virtually anywhere for virtually any application. Another great benefit of PV devices is that to add more power, all you need to do is add more panels, unlike fossil fuel and nuclear facilities, which require multimegawatt pl economically feasible.

How do solar panels work? Picture the hood of your car. As it sits in the sun, the el the metal become excited, warming the hood up. In the same way, the electrons in panel become excited and begin moving back and forth, creating friction and heat. panels organize and direct the flow of some of these excited electrons from one side to the other. It is this flow of electrons that is by definition, electricity. Once the el produced in the panel, it will be stored in the batteries the same as the electricity generators is stored. This energy can then be used to power DC devices directly, c use of an inverter, turned into AC to power your typical household appliances. Solar p be used in a stand alone application, or in tandem with a wind generator to pro battery charging in either sunny or windy conditions.

Windy City will help you determine what configuration of solar and wind power bes needs. In reference to the following charts, find your location for hours of sun per multiply by the W (watts) of your panel to determine watts per day produced.



SOLAR PANELS	WATTS	PRICE	VOLTS	AMPS	WARRANTY
Astropower 120	120	$705	16.9	7.1	20 years
Astropower 75	75	$435	17	4.4	20 years
Astropower 60	60	$390	17	3.52	20 years
Kyocera 120	120	$680	16.9	7.1	25 years
Kyocera 80	80	$460	16.9	4.73	25 years
Kyocera 60	60	$370	16.9	3.55	25 years
Siemens SR 90	90	$580	17	5.4	25 years
Siemens SP 75	75	$480	17	4.4	25 years
Siemens SM 55	55	$360	17.4	3.15	25 years
Solarex MSX 77	77	$480	16.9	4.56	20 years
Solarex MSX 64	64	$410	17.5	3.66	20 years
Solarex VLX 53	53	$350	17.1	3.1	10 years
Unisolar 64	64	$370	16.5	3.88	20 years
Unisolar 42	42	$260	16.5	2.54	10 years
Unisolar 32	32	$200	16.5	1.94	10 years
Unisolar 21	21	$175	21	1.27	5 years
Unisolar11	10.3	$125	16.5	0.62	5 years
Unisolar 5	5	$70	16.5	0.3	5 years

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