

Amendment 37 & Solar Incentives



COLORADO AMENDMENT 37: WHAT DOES IT MEANT TO YOU?

In November 2004, Colorado became the first state ever to adopt a renewable energy standard by popular vote. Amendment 37 requires that qualifying Colorado utilities generate 10% of their electric supply from renewable energy sources by 2015. It also presents an excellent opportunity for residents interested in installing solar photovoltaic systems.

Amendment 37 stipulates that four percent of the renewable energy requirement come from solar electric (PV) systems. Half of this requirement must come from individual residential and business customer solar systems. This provision applies specifically to Xcel Energy and Aquila, which must offer rebates to stimulate the market for PV.

THE SOLAR SET ASIDE

- ☀ The solar requirement for customer systems amounts to about 40 Megawatts (MW) of PV being installed by 2015. This will result in about 2,000 solar powered Colorado homes and businesses.
- ☀ In Colorado, Xcel Energy, Aquila, Colorado Springs Utilities and United Power established rebate programs for its residential and business customers installing PV. Xcel's program, Solar*Rewards, offers a rebate of \$4.50/watt for systems under 10 kW. This is a combination of a \$2.00/watt rebate and a \$2.50 payment for the Renewable Energy Credit (REC). These rebates significantly improve the economics of installing home PV systems (see box at right).
- ☀ In addition, solar systems installed between January 1, 2006 and December 31, 2008, are eligible for a Federal tax credit of 30% (applied to after-rebate cost). See below for more information.
- ☀ Rebates are retroactive to December 1, 2004, and all PV systems installed after this date are eligible for rebates.
- ☀ Amendment 37 also requires that qualifying utilities offer net metering for PV installations. (See page 2).

NET METERING

Net metering is an additional economic incentive for homeowners and businesses that install renewable energy systems that are connected to the grid. Net metering allows PV owners to store excess electricity on the grid and creates a credit on their utility bill. True net metering uses a single meter that runs forward when the home is using electricity from the utility and backward when the PV system produces more electricity than the home or business is using (i.e., supplies power to the grid). Excess electricity production is carried over from month to month and utility bill credits are settled at the end of the year. Net metering eliminates the need for battery back-up on PV systems.

Amendment 37 requires Xcel and Aquila to offer net metering to their customers. Xcel Energy recently implemented new net metering tariffs and rules for residential and commercial customers with solar PV systems up to 10 kilowatts (see side bar). Further negotiation is being conducted at the PUC to design net metering rules for systems larger than 10 kW.

FEDERAL SOLAR TAX CREDITS

The Federal Energy Bill passed in July, 2005 includes the first residential tax credit for solar energy in the past two decades. The bill creates a 30% tax credit for residential solar installations up to a \$2,000 cap. It applies to all forms of solar energy systems including PV and solar thermal technologies that are installed between January 1, 2006 and December 31, 2008. When combined with Amendment 37 rebates, the 30% tax credit applies to the after-rebate purchase amount of new systems. For more detailed information on Federal as well as state incentives for renewable energy, read the “Energy Efficiency & Renewable Energy Federal Incentives” Skinny.

NET METERING

Xcel has two tariffs for net metering PV systems at residential (R) and commercial (C) facilities. They feature true net metering including:

- ☀ System size up to 10 kW.
- ☀ System owners must meet Xcel’s interconnection standards and sign an interconnection agreement.
- ☀ Xcel pays for and installs a net meter.
- ☀ For any given month, the value of net excess production is carried over to the following month.
- ☀ If net production is negative at the end of the year, the customer will be paid at the “incremental cost of electricity supply averaged over the prior twelve months.”
- ☀ Charges otherwise are the same as Xcel’s normal R and C tariffs
- ☀ APPLY HERE:
<https://www.xcelenergysolarrewards.com/Login/Login.aspx?ReturnUrl=%2fDefault.aspx>

Thinking of installing a PV system? Here’s what you need to know.

Before you install a PV system on your home, it is a good idea to maximize your home’s energy - efficiency to make your PV system as cost-effective as possible.

A 2,000 watt (2 kW) PV system could reasonably provide about half of the electricity needs of an energy-efficient 2,000 square foot home.

Here’s the cost breakdown:

2,000 watt PV system installed	\$18,000
\$4.50/watt rebate:	(\$9,000)
<u>30% (up to \$2,000) tax credit</u>	<u>(\$2,000)</u>

Customer cost \$7,000

- ☀ With net metering, a 2,000 watt system would save about \$300 per year on a homeowner’s electric bill.
- ☀ As energy rates rise, the yearly energy cost savings increase as well.

LEARN MORE

Skinny on “Federal Incentives” and “Local Incentives”

<http://www.conservationcenter.org>

Xcel Energy’s Solar*Rewards rebate

http://www.xcelenergy.com/Residential/RenewableEnergy/Solar_Rewards/Pages/home.aspx

Aquila’s rebate

<http://pv.aquilaprograms.com/>

Colorado Springs Utilities’ rebate

http://www.csu.org/residential/rebates/renew_rebate/index.html

United Power’s rebate

<http://www.unitedpower.com/rebate.aspx#solar>