

With this information, the RCN is developed by multiplying the cost per kilowatt of AC electricity times the AC electricity generating capacity of the subject. The RCN estimate represents the reasonable costs of acquisition, installation, sales tax, and freight of comparable non-renewable property as of the June 30 appraisal date. The RCN estimation method will be applied to all locally assessed renewable energy property capable of producing two megawatts (2,000 kilowatts) or less of AC electricity.

Renewable energy property cost per kilowatt in AC electricity information is provided in the annual Division study titled **RENEWABLE ENERGY ASSESSMENT THRESHOLD ANALYSIS** which is located under the State Assessed section of the Division of Property Taxation website at http://dola.colorado.gov/dpt/state_assessed/index.htm.

Annual depreciation, based on the age of the system, will be applied utilizing Industry Category 14 (Renewable Energy Personal Property) with a twenty (20) year economic life using the Division's "General Percent Good Table" and "Level of Value (LOV) Adjustment Factor" as published in Assessors Reference Library, Volume 5, Chapter 4.

For the current tax year, Category 14 has an RCN factor of 1.00 and LOV factor of 1.00. The cost that must be applied for the current tax year valuation is \$1,008 per kilowatt of AC electricity.

The steps for utilizing the cost approach to value renewable energy property follow:

1. Ascertain the AC electricity generation capacity (e.g., 30 kilowatts) by adding the generation nameplate capacity of each panel/module together. Also determine the year of acquisition and installation of the renewable energy property. This information comes from the declaration schedule completed by the owner or from additional information requests and contacts, if necessary. If the generation capacity is declared in DC, an AC inverter/transformer rate adjustment must be applied. If the taxpayer does not provide the inverter/transformer rate adjustment, then the National Renewable Energy Laboratories (NREL) PV Watts source may be considered. See http://www.nrel.gov/rredc/pvwatts/changing_parameters.html
2. Multiply the AC electricity generation capacity of the system in kilowatts (kW) of AC electricity by the rate per kilowatt of AC electricity listed in the **RENEWABLE ENERGY ASSESSMENT THRESHOLD ANALYSIS** study for the appropriate electricity production capability. The resulting number represents the estimated replacement cost new of the property as of the assessment date. For the current tax year, the rate is \$1,008 per kilowatt of AC electricity for all systems up to and including two (2) megawatts (2,000 kilowatts).
3. Adjust for depreciation by multiplying the estimated replacement cost new by the percent good based on the age of the system. The percent good is based on the twenty (20) year life table published by the Division of Property Taxation in Chapter 4 of ARL 5. The result represents the replacement cost new less depreciation of the renewable energy property as of the assessment date.
4. Multiply the estimated RCNLD by the Industry Category 14 level of value (LOV) adjustment factor to derive the estimated actual value as of June 30 of the most recent previous even year.

An example of the valuation process is shown below:

During the previous tax year, a roof-mounted thirty (30) kilowatt of AC electricity photovoltaic (PV) solar panel system was installed on a restaurant. The system was installed and in use in the previous tax year and therefore the property is valued for the current tax year as one (1) year old.

Valuation of the PV system is calculated as follows:

	30	Generation capacity in AC electricity kilowatts
x	\$1,008	Rate per kilowatt of AC electricity (current tax year rate)
	\$30,240	Estimated RCN
x	0.98	Percent good from the 20 year life depreciation table
	\$29,635	Estimated RCNLD
x	1.00	Level of value adjustment factor (current tax year LOV)
	<u>\$29,635</u>	Estimated actual value as of the June 30 previous even year

Market and Income Valuation of Renewable Energy Property

An assessor must consider both the sales comparison (market) and income approaches. Under the provisions of § 39-1-103 (13), C.R.S., the actual value of any renewable energy property cannot exceed the value of the property derived using the cost approach.

Assessment of Renewable Energy Credits by County Assessors

Renewable Energy Credits (RECs), also known as “green tags” or “renewable energy certificates”, are tradable environmental commodities that represent proof that one (1) megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource. These certificates can be sold and traded and the owner of the REC can claim to have purchased renewable energy.

RECs are classified as intangible personal property and, exempt pursuant to § 39-3-118, C.R.S., so they cannot be valued separately by the county assessor.

STATE ASSESSED RENEWABLE ENERGY SYSTEMS

All renewable energy systems with greater than two (2) megawatts of AC electricity generation capacity are valued as public utility property by the State Assessed Properties Section of the Division of Property Taxation (Division). Small or low impact hydroelectric facilities, geothermal energy facilities, and biomass energy facilities, as defined in § 39-4-101, C.R.S., that are put into use on or after January 1, 2010 and not primarily designed to supply electricity for consumption on site are state assessed regardless of AC generation capacity.

RENEWABLE ENERGY INCENTIVES

Colorado does not have any general statewide property tax incentives for renewable energy. However, §§ 30-11-107.3 and 31-20-101.3, C.R.S., allow county and municipal governments to “offer an incentive, in the form of a county property tax or sales tax credit or rebate, to a ... property owner who installs a renewable energy fixture on his ... property.” For more information on this incentive see **Assessors’ Reference Library, Volume 2, Chapter 12**.