

## Solar Water Heating Program

Four County EMC members who are using electric water heating are available to take advantage of our \$1,000 solar water heating rebate if they choose to convert to a solar thermal unit with electric backup.

A solar water heating system may be one of the best investments you can currently make in solar technology. In the average home, water heating is the second largest energy consumer in the home, next to space conditioning. Water heating accounts for about 15% of your energy bills. Solar water heaters are capable of generating the same amount of heated water at a fraction of energy expense, compared to contemporary electric water heating systems.

There are two primary types of solar water heaters, active and passive.

### Active Solar Water Heating Systems

Active systems use pumps to circulate water or a non-freezing heat-transfer fluid from storage tanks through the collectors. Active systems are usually slightly more expensive than passive systems, but they are also usually more efficient. Active solar systems must be closed-looped.

### Passive Solar Water Heating Systems

Passive systems move household water or a heat-transfer fluid (glycol) through the system without using pumps or electricity. Passive systems work during power outages. Passive systems are typically less expensive to purchase and maintain than other types of systems. They are also inherently more reliable and may last longer. However, passive systems are not usually as efficient as active systems.

### Eligibility:

- You must receive electric service from Four County EMC in your home.
- The unit must have been newly installed in the last 90 days preceding the application for rebate.
- System must be checked for compliance by an authorized Four County EMC employee before a rebate is issued.
- Member must sign an agreement, which allows the Cooperative the rights to any environmental attributes, such renewable energy certificates, produced from the solar water heating unit in exchange for the rebate.

### System Requirements:

- All solar collectors must have OG-100 certification by the Solar Rating and Certification (SRCC). All solar water heating systems must have SRCC OG-300 certification.
- Eligible solar water heating systems must incorporate freeze and over heat protection strategies that:

- ✓ Require no regular manual operations on the part of the residence occupant,
- ✓ Result in no lost electrical energy due to re-circulation of heated water during cold winter conditions and
- ✓ Result in no lost electrical energy due to drain of heated water
- Collectors must be oriented to face within 45 degrees of due South with a tilt angle between 15 and 40 degrees above the southern horizon.
- Collectors oriented East, West or that are flat mounted must be correctly sized using a corrective factor formula.
- System must be installed by a contractor currently certified to install solar water heaters and has all required NC licenses and certifications.

Restrictions:

- Rebates are subject to change without notice.
- All rebates are subject to approval and are contingent upon fund availability.

How to apply:

- Decide which system works best for your home.
- Contact a qualified installer.
- Complete installation.
- To receive an application, call our office at 888-368-7289 or e-mail a request to [chrisingram@fourcty.org](mailto:chrisingram@fourcty.org).