

America's Electric Cooperatives

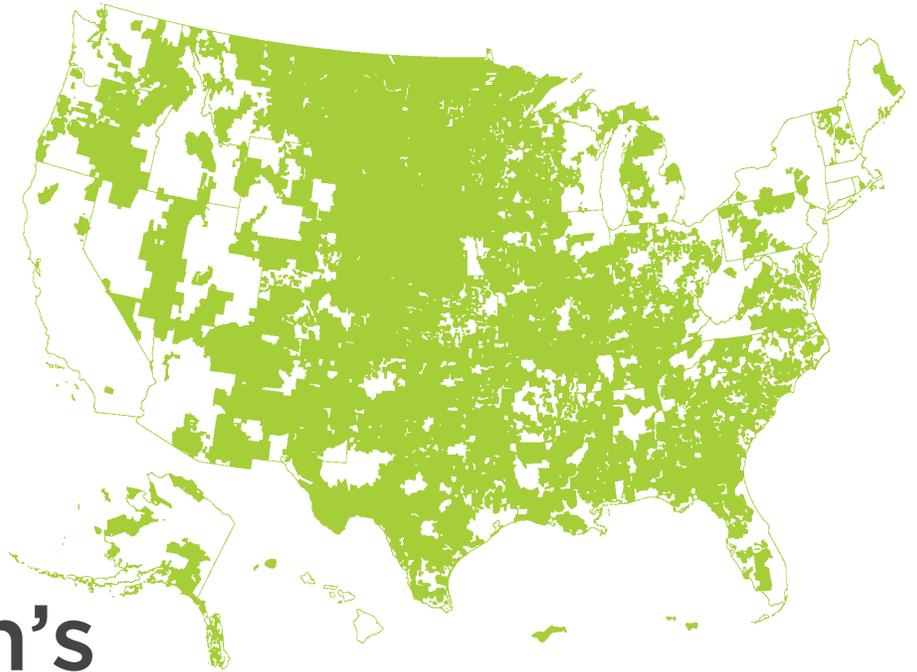
From booming suburbs to remote rural farming communities, America's electric cooperatives are energy providers and engines of economic development for more than 19 million American homes, businesses, farms and schools in 47 states.

833 distribution
and 62 generation
& transmission
cooperatives

Power

56%

of the nation's
landmass.



Own and maintain

42%

(2.6 million miles)
of U.S. electric
distribution lines.

Power more than

19 million

businesses, homes,
schools and farms.

Serve

42 million people

across **88%** of U.S. counties.

Distribution cooperatives are the foundation of the electric cooperative network. They are the direct point of contact with co-op members in the delivery of electricity and other services.

Generation & transmission cooperatives provide wholesale power to distribution co-ops through their own electric generation facilities or by purchasing power on behalf of the distribution members.

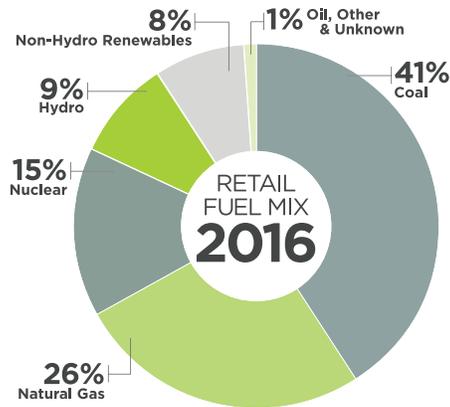
For more information, visit: www.electric.coop | [@NRECANews](https://twitter.com/NRECANews)



Electricity use and fuel mix

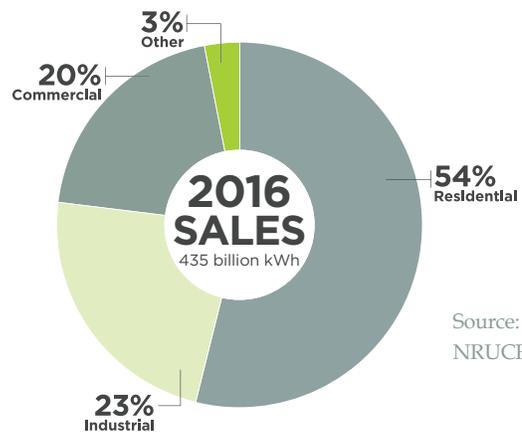
Electric cooperatives play a vital role in transforming the electric sector. Advanced communications and automation technology enable co-ops to improve the resiliency and efficiency of their systems as they reduce environmental impacts by adding renewable resources.

Note: Non-hydro renewables includes owned and directly purchased generation, plus generation in the mix from wholesale market purchases.



Source: NRECA

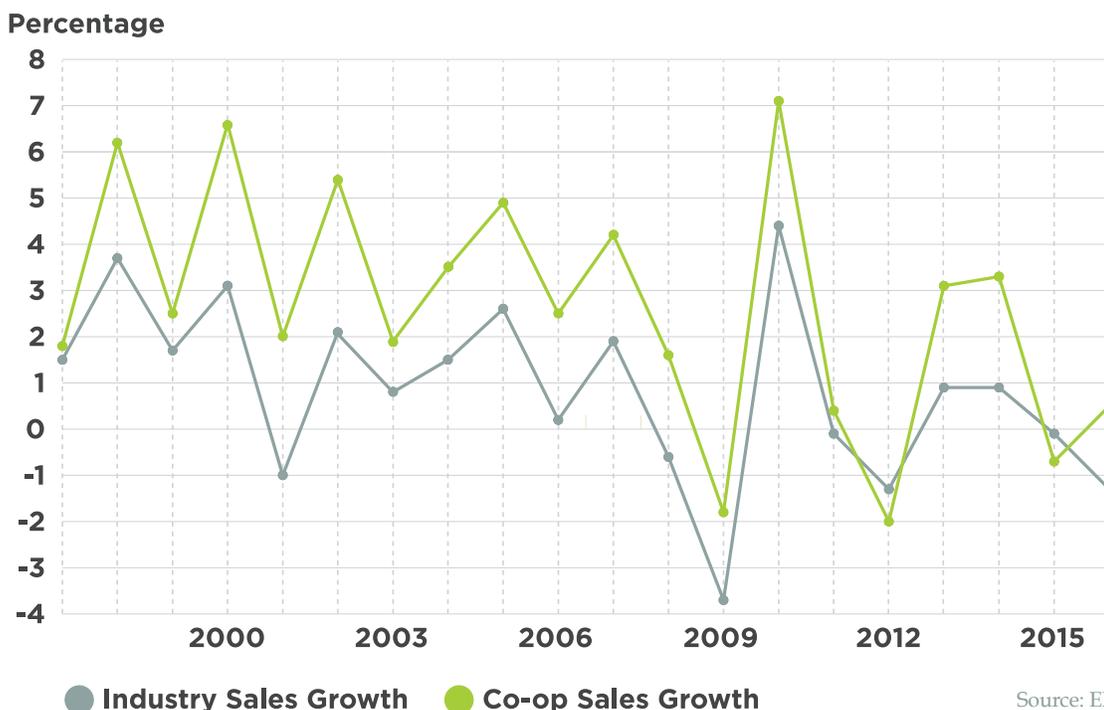
- Co-ops added **295,995 new members** in 2016
- **84%** of electric co-ops had a net increase in members in 2016
- Electricity demand at co-ops increased about one-half of a percent in 2016, with co-op **retail sales reaching 435 billion kilowatt-hours**
- Co-op residential electricity sales increased **0.4%**
- Commercial & industrial increased **0.3%**; irrigation sales jumped **10.5%**



Source: NRUCFC and RUS

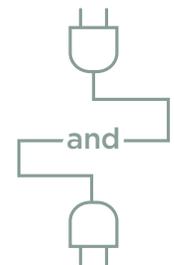
Electricity sales growth

Co-op sales growth rates generally surpass that of the electric utility industry as a whole.



Source: EIA

Co-ops generate **5%** of total U.S. electricity



sell **13%** of all U.S. electricity

Co-ops are reducing emissions ...

Cleaner air:

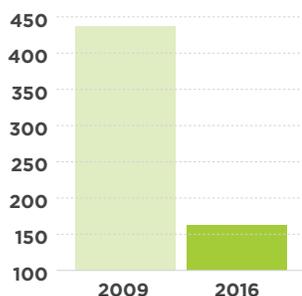
Cooperatives are reducing emissions through a combination of emission-reduction measures at power plants and fuel switching to natural gas and renewables.

Co-ops have:

Reduced **sulphur dioxide** emissions 66% during 2009-2016.

TOTAL SO₂ EMISSIONS

Thousands (short tons)



Reduced **nitrogen oxide** emissions 24% during 2009-2016.

TOTAL NO_x EMISSIONS

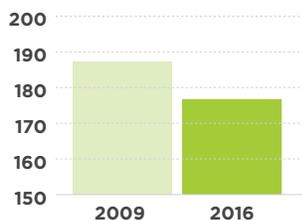
Thousands (short tons)



Reduced **carbon dioxide** emissions 8% since 2005 while increasing generation by 15 million megawatt-hours.

TOTAL CO₂ EMISSIONS

Millions (short tons)



Source: EPA and EIA

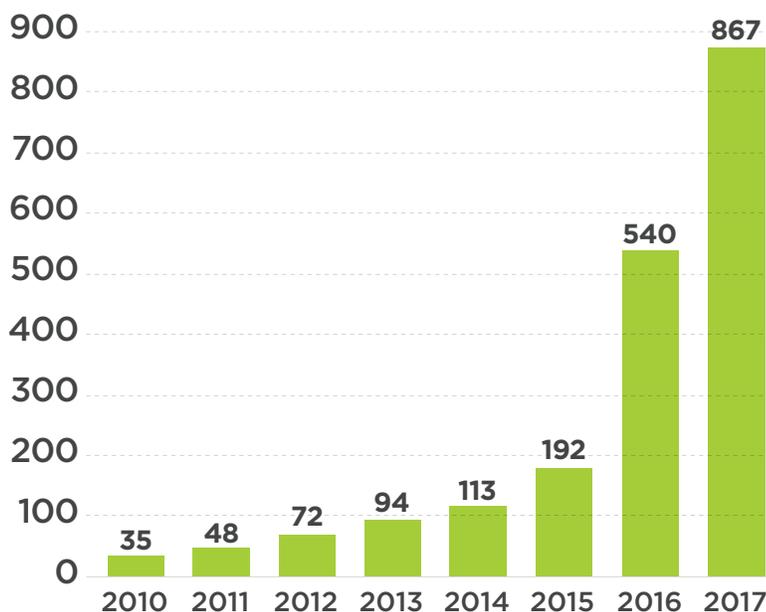
... and jump starting renewable energy growth



- Since 2010, co-op non-hydro **renewable energy** capacity has more than doubled from 4 gigawatts to 9.2 gigawatts—a 130% increase. More than 90 percent of electric co-ops provide electricity generated by renewable energy resources.
- Co-ops purchase 10 gigawatts of **hydropower** from federal power marketing administrations.
- More than 560 co-ops in 37 states use 6.9 gigawatts of **wind** energy.
- Total **solar** energy capacity at electric cooperatives is more than four times what it was in 2015, capable of generating more than 860 megawatts of electricity.
- A Department of Energy partnership with 17 electric co-ops has supported the development of 23 megawatts of **utility-scale solar** in 15 states.

Cooperative solar is skyrocketing

Solar Capacity (megawatts AC)



NOTE: Co-op solar capacity owned or purchased under contract

Source: NRECA

The cooperative difference



Electric co-ops are local energy and technology providers. They are shaped by the specific needs of the communities they serve. This local, member-owned structure is one reason why cooperatives enjoy the highest consumer-satisfaction scores within the electric industry, according to J.D. Power and Associates and the American Consumer Satisfaction Index.

- Co-ops **earned the top spot** in the J.D. Power and Associates 2017 Electric Utility Customer Satisfaction Study.
- Electric cooperatives, on average, **score three points higher** than all other energy utilities, according to the 2017 American Consumer Satisfaction Index.

Committed to serving the last mile

- Co-ops serve an average of **8 consumers per mile** of electric line; collect annual revenue of \$19,000 per mile of line.
- All other utilities average **32 customers** per mile of line; collect \$79,000 per mile.

Electric cooperatives are guided by seven principles:

1. Voluntary and open membership
2. Democratic member control
3. Members' economic participation
4. Autonomy and independence
5. Education training and information
6. Cooperation among cooperatives
7. Concern for community

Electric cooperatives are economic engines in their communities



provide
71,000
jobs



own **\$183**
billion in
assets



Invest **\$12**
billion
annually
in local
economies



pay **\$1.3**
billion
annually in
state/local
taxes

The entire
electric power
sector generates
\$880 billion
in economic
impact annually
(5 percent of
America's GDP)

