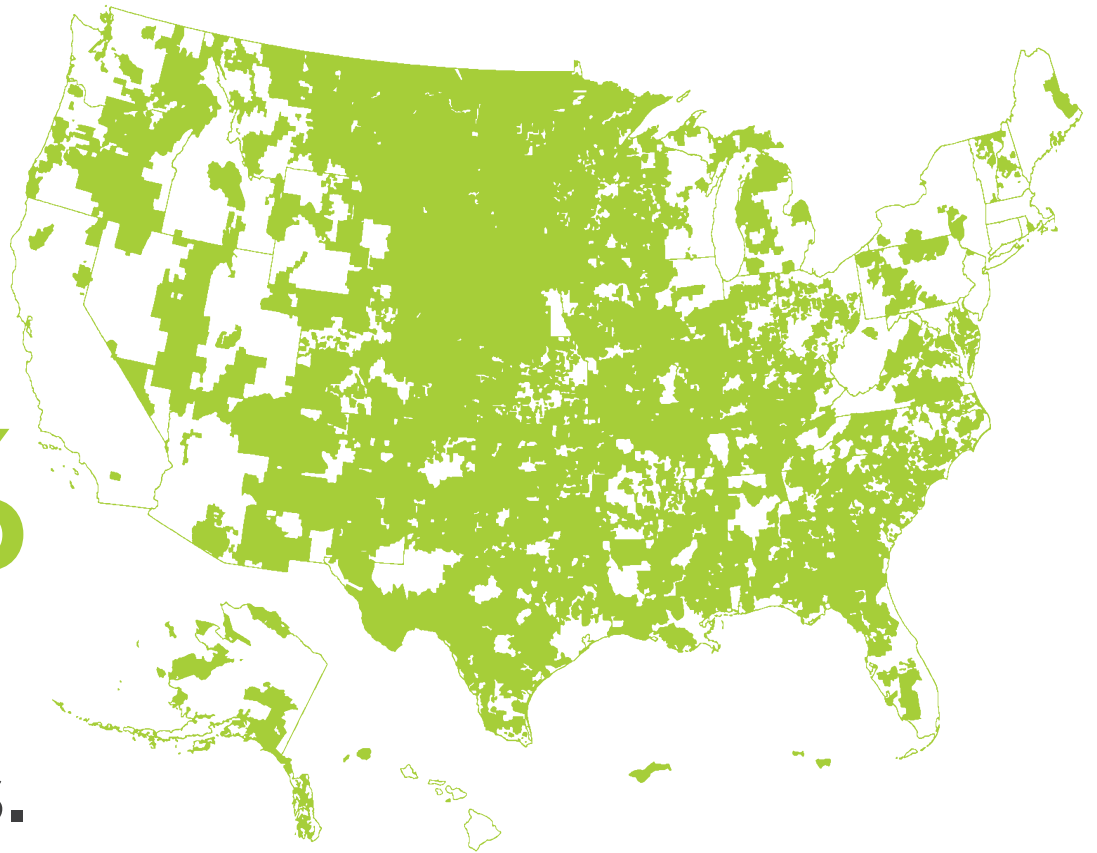


America's Electric Cooperatives

From booming suburbs to remote rural communities, America's electric cooperatives are energy providers and engines of economic development. Electric cooperatives play a vital role in transforming communities.

Cooperatives
Power
56%
of the
nation's
landmass.



Own and maintain
42%
(2.6 million miles)
of U.S. electric
distribution lines that
serve our communities.

Power over
20 million
businesses, homes,
schools and farms in
47 states.

Serve
42 million
people across
88% of U.S. counties.

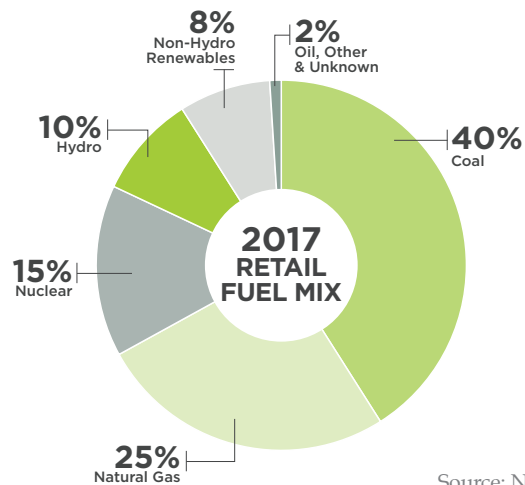
831 distribution cooperatives are the foundation of the electric cooperative network. They were built by and serve co-op members in the community with the delivery of electricity and other services.

62 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.

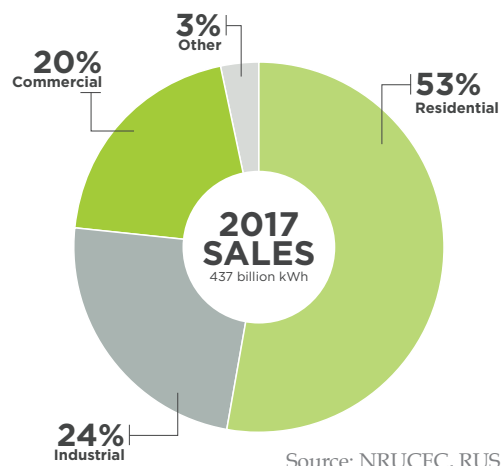
Electricity use and energy mix

Co-ops use advanced communications and automation technology to improve reliability and efficiency while reducing environmental impacts by growing the use of renewable resources.

Note: Non-hydro renewables includes owned and directly purchased generation, plus generation in the mix from wholesale market purchases and do not reflect renewable credits.



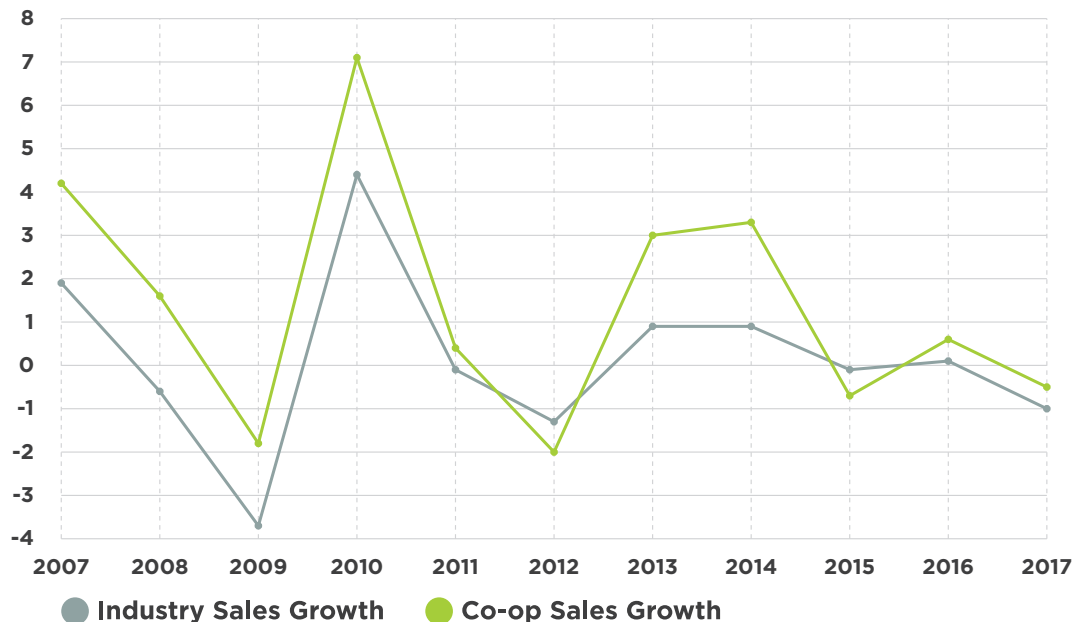
- Co-ops added **333,013 new members** in 2017.
- **83%** of electric co-ops had a net increase in members in 2017.
- Electricity demand at co-ops decreased about one-half of one percent in 2017, with co-op retail sales reaching **437 billion kilowatt-hours**.
- Co-op residential electricity sales decreased **2%**.
- Commercial & industrial sales increased **2.85%**; irrigation sales decreased **6.3%**.



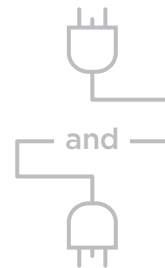
Electricity sales growth

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

Percentage



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



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

Co-ops are reducing emissions ...

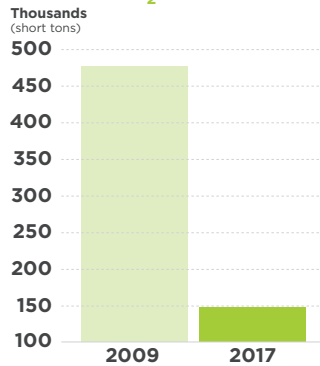
Cleaner air

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

Co-ops have:

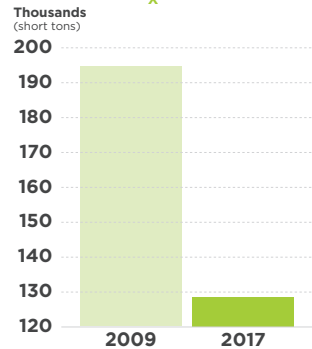
Reduced **sulphur dioxide** emissions 68% from 2009-2017.

TOTAL SO₂ EMISSIONS



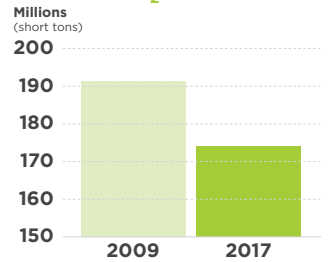
Reduced **nitrogen oxide** emissions 34% from 2009-2017.

TOTAL NO_x EMISSIONS



Reduced **carbon dioxide** emissions 9% since 2009 while increasing generation by more than 12 million megawatt-hours.

TOTAL CO₂ EMISSIONS



Source: EPA and EIA

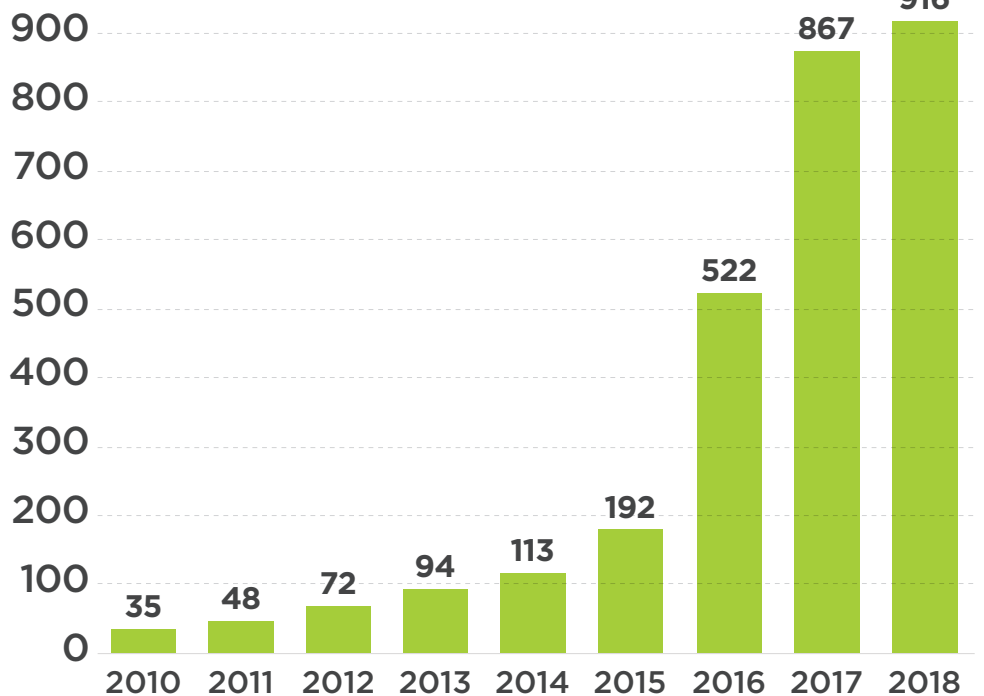
... and jump starting renewable energy growth



- Since 2010, co-op **renewable energy** capacity has increased 145% from 4 gigawatts to 9.7 gigawatts. More than 90 percent of electric co-ops provide electricity generated by renewable energy resources.
- A Department of Energy partnership with 17 electric co-ops has supported the development of 30 megawatts of **utility-scale solar** in 10 states.
- Co-ops also purchase 10 gigawatts of **hydropower** from federal power marketing administrations.
- More than 560 co-ops in 36 states use enough **wind** energy to serve 2 million homes.

Cooperative solar is skyrocketing

Solar Capacity (megawatts AC)



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

Source: NRECA

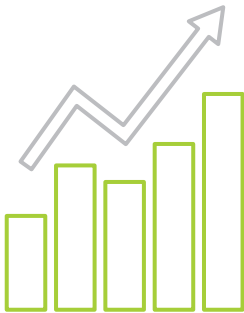
Electric cooperatives are economic engines in their communities



In 2017, electric cooperatives **supported 611,600 American jobs**

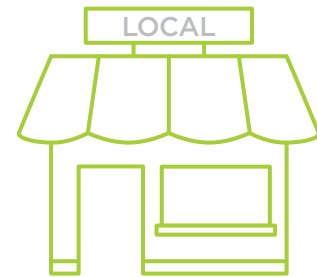
- 68,200 electric co-op jobs
- 97,600 contractor jobs
- 170,900 supplier jobs
- 274,900 consumer spending jobs

contributed **\$88.4 billion** to the U.S. GDP annually



generated more than **\$22 billion** in federal, state and local taxes

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



Source: The Economic Impact of America's Electric Cooperatives, FTI Consulting, March 2019

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-driven 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.

- Electric cooperatives are built by and belong to the communities they serve. They are led by members from the community and are uniquely suited to meet local needs.
- In 2017, America's electric co-ops **returned more than \$1.1 billion** in excess revenue to their consumer-members.
- 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 electric companies, according to the 2017 American Consumer Satisfaction Index.

Source: NRECA