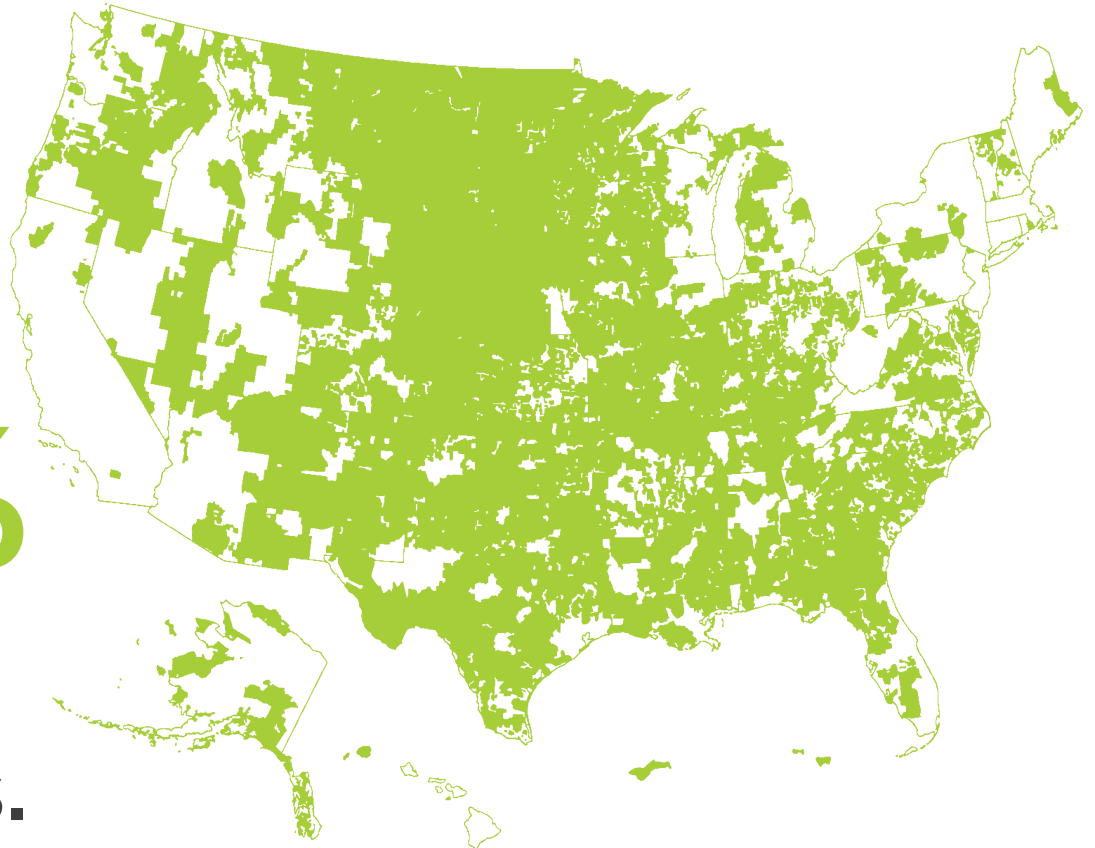


# America's Electric Cooperatives

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  
48 states.

Serve  
**42 million**  
people across  
**2,500+**  
U.S. counties.

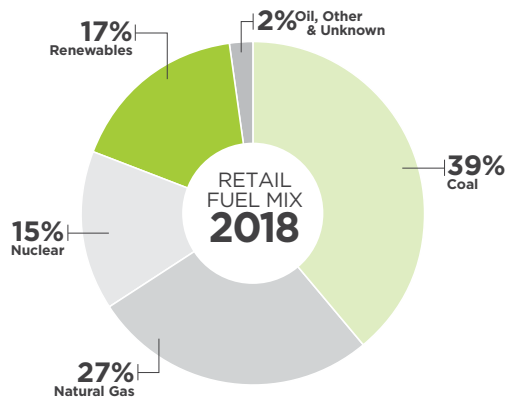
**834 distribution cooperatives** are the foundation of the electric cooperative network. They were built by and serve co-op members in the community with the delivery of electricity and other services.

**63 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

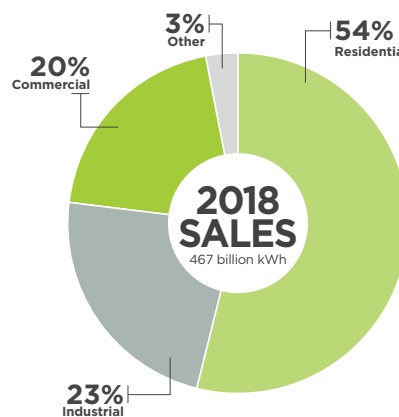
Co-ops use advanced communications and automation technology to improve reliability and efficiency while reducing environmental impacts by growing the use of renewable resources.

*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.*



Source: NRECA Research

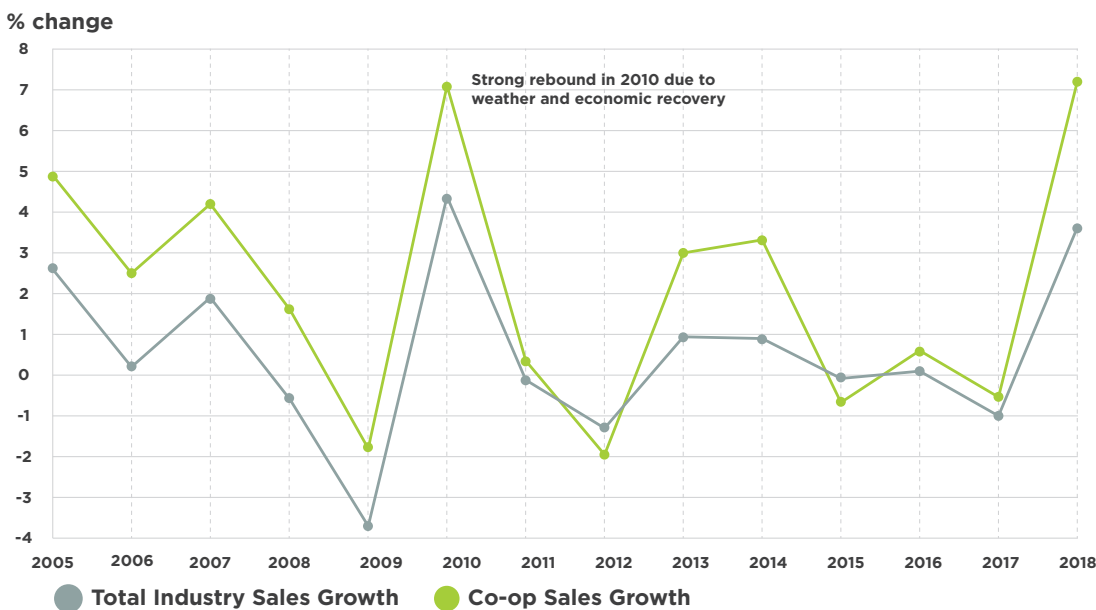
- Co-ops added **281,000 new members** in 2018.
- **85%** of electric co-ops had a net increase in members in 2018.
- Electricity sales at co-ops increased more than **7%** in 2018, with co-op retail sales reaching **467 billion kilowatt-hours**.
- Residential sales increased **9.3%**, commercial sales increased **3.5%** and industrial sales increased **6.2%**.



Source: RUS and CFC Form 7 data (excludes sales for resale)

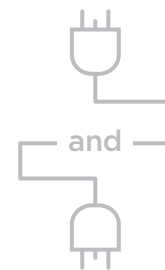
## Co-op Sales Growth Normally Outpaces the Industry

Co-op sales growth rates generally surpass that of the total electric utility industry as a whole. In 2018, extreme weather caused sales to soar, especially for co-ops whose sales are more heavily residential than the industry as a whole.



Source: EIA Form 861 data; NOAA National Climate Reports

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



deliver **12%** of all U.S. electricity

# Co-ops are reducing emissions ...

## Cleaner air

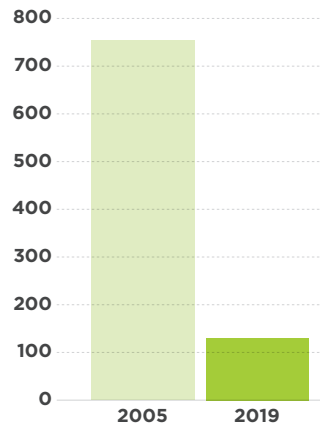
Cooperatives are meeting member expectations by reducing emissions through a combination of emission-reduction measures at power plants and fuel switching to natural gas and renewables.

### Co-ops have:

Reduced **sulphur dioxide** emissions 82.8% from 2005-2019.

#### TOTAL SO<sub>2</sub> EMISSIONS

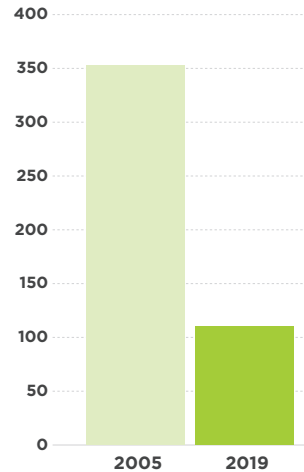
Thousands (short tons)



Reduced **nitrogen oxide** emissions 68.8% from 2005-2019.

#### TOTAL NO<sub>x</sub> EMISSIONS

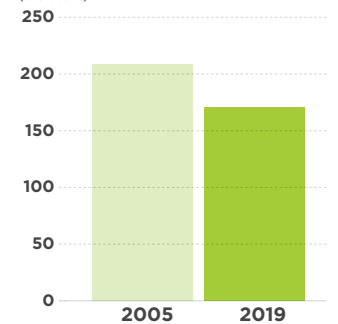
Thousands (short tons)



Reduced **carbon dioxide** emissions 18.1% since 2005.

#### TOTAL CO<sub>2</sub> EMISSIONS

Millions (short tons)



Source: EPA and EIA

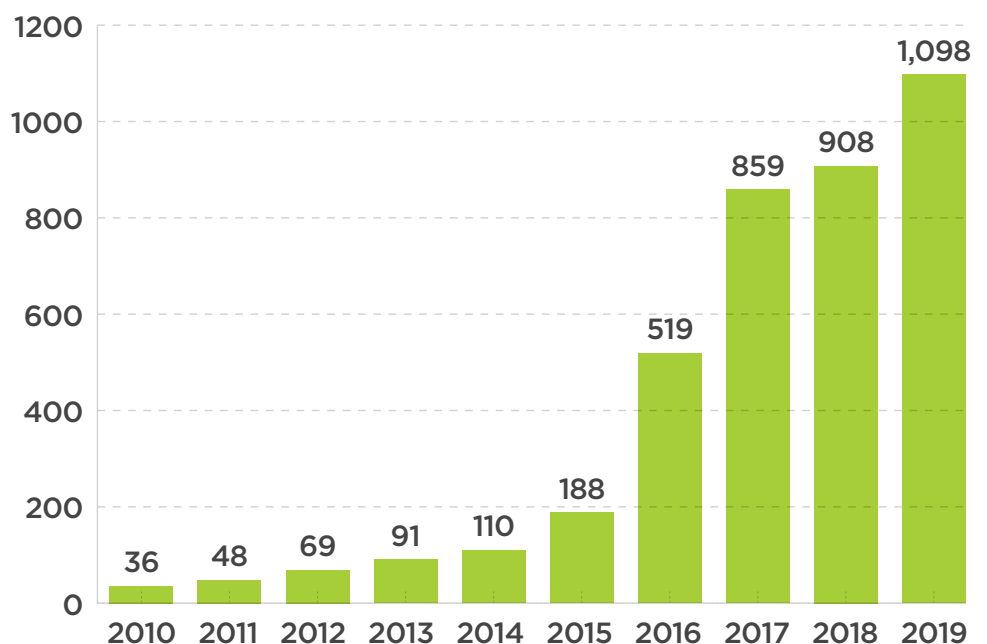
## ... and jump starting renewable energy growth



- From 2010 to 2019, co-op **renewable energy** capacity increased 151% from 4 gigawatts to 10 gigawatts. More than 95 percent of electric co-ops provide electricity generated by renewable energy resources.
- Co-ops also purchase 10 gigawatts of **hydropower** from federal power marketing administrations.
- Electric co-ops have plans to add 6 gigawatts of new renewable capacity from 2020-2023, including more than 4 GW of additional solar capacity.
- More than 475 co-ops in 33 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

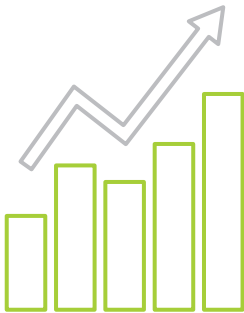
# Electric cooperatives are economic engines in their communities



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

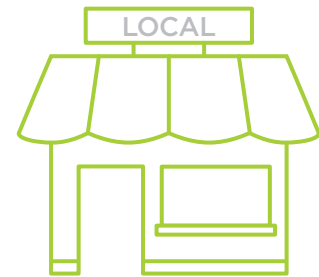
- 68,200 electric co-op jobs
- 97,600 contractor jobs
- 170,900 supplier jobs
- 274,900 consumer spending jobs

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 2018, America's electric co-ops returned more than **\$1.2 billion in capital credits** 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