



2019 CO2 EMISSION REPORT

WHO WE ARE

Founded in 1939, Holy Cross Energy (HCE) is a not-for-profit rural electric cooperative that provides safe, reliable, affordable and sustainable energy and services that improve the quality of life for almost 44,000 members and their communities in Western Colorado. We are committed to leading the responsible transition to a clean energy future.

POWER SUPPLY

HCE has long term power supply commitments through contracts with Public Service Company of Colorado (a subsidiary of Xcel Energy), Guzman Energy LLC and Western Area Power Administration. HCE also has long term purchase power agreements with several small clean and renewable generators located in and near our service territory, including 7 small hydroelectric generators, 9 small commercial solar arrays, a 12 MW biomass plant, and 4 community owned solar arrays. A 145-kW solar array provided bill credits to low and moderate income HCE members at no cost to participants.

HCE owns an 8% share in Unit 3 at the Comanche Generating Station located in Pueblo, CO. The energy from this 750 MW super-critical, coal-fired generating unit became operational in July of 2010. Guzman Energy LLC began purchasing this energy from HCE in February of 2019.

Just over 44% of the energy we provide our members was supplied through clean and renewable resources, such as wind, solar, hydro, biomass, and coal mine methane generation. 40% came from coal,



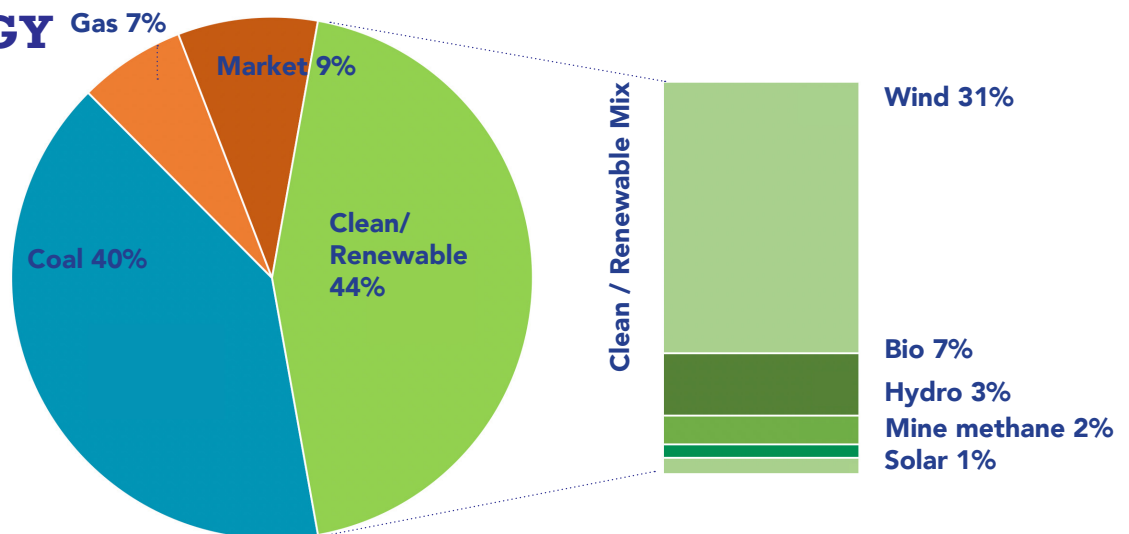
HCE staff helping to install on-campus solar power for HCE headquarters in Glenwood Springs, CO

7% came from gas, and less than 9% was from market sources which could not be identified with a high level of certainty.

HCE offers a voluntary program to support renewable energy generation in Colorado in which members may select their fuel source: Colorado wind, local hydro, and local solar. 36,961 MWh was purchased by 1,715 HCE members in 2019. In addition, HCE's members installed 1,507 small renewable energy generators (such as solar panels) behind their meters by the end of 2019. The 12,286 kW of distributed generation produced about 6,610 MWh during the calendar year.

Colorado passed a Renewable Energy Standard (RES) in 2004 by voter initiative that required Investor Owned Utilities to supply 10% of their retail electric sales from renewable sources by 2020.

2019 ENERGY BY FUEL





HCE's PuRE program allows members to purchase 100% renewable energy. The Town of Snowmass Village participates in the program.

In 2007, House Bill 1281 added a requirement that electric cooperatives supply 10% of retail sales from renewable sources by 2020, with the required percentages increasing over time. HCE was required to supply 6% of retail sales from renewable sources in 2019, or the equivalent of 73,083 MWh. 535,942 MWh (44%) of HCE's retail electric sales came from sources which qualify for the Colorado RES in 2019, excluding renewable sales to customers under the voluntary pricing programs. Renewable Energy Credits equal to those sales are retired on an annual basis using the RES Standards and not used for any other purpose.

EMISSIONS & RENEWABLE ENERGY

HCE procured 1,595,899 MWh of wholesale and generated power (including estimated generation from net meters) and billed for 1,218,050 MWh to serve consumers' loads. The difference includes wholesale transactions, transmission and distribution line losses, electricity used in company facilities and electricity provided to net metered customers that was offset under that billing mechanism.

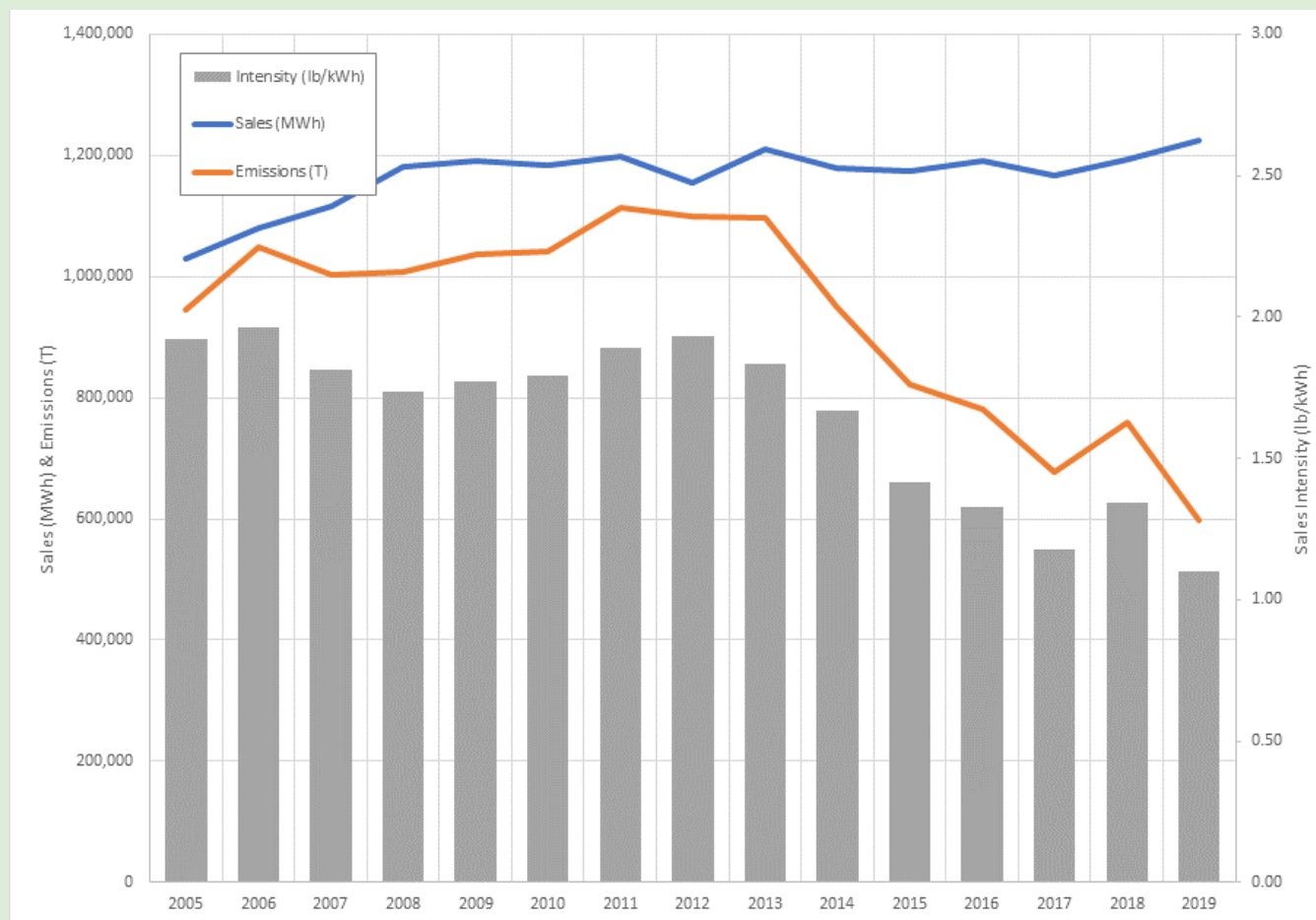
In 2019, HCE completed a voluntary Greenhouse Gas Audit utilizing Lotus Engineering and Sustainability, a Colorado Consultant. The audit established a baseline for the calendar years of 2005 and 2014 to use in future local and state policies and to measure our progress towards our clean energy goals.

The CO₂ emissions associated with electric power generation used to serve HCE's customers in 2019 totaled approximately 597,496 metric tons of CO₂ equivalent emissions. Emissions in 2019 were 36.7% lower than when tracking began in 2005 while sales were 18% higher. Additionally, emissions in 2019 have decreased by 37.1% from our 2014 level while sales increased by 3.2%. After accounting for line losses and the sales which have no associated emissions (under voluntary green pricing programs), the average CO₂ intensity for delivered electricity during 2019 was 1.10 lb. per kWh.

TOTAL CO₂ EMISSIONS

YEAR	RECEIVED POWER (MWh)	TOTAL SALES (MWh)	RENEWABLE SALES (MWh)	EMISSIONS (Short tons)
2019	1,275,491	1,224,906	36,961	597,496
2018	1,257,760	1,192,939	13,981	759,724
2014	1,240,374	1,179,789	15,002	950,373
2005	1,080,417	1,032,137	10,501	944,419

SALES & CO2 HISTORY



A Touchstone Energy® Cooperative 

ADDITIONAL INFORMATION

Information for additional years is available at www.holycross.com/co2-emissions.

This information is based on the best information available at the time the report is issued. This report may be updated to reflect changes in the information used to calculate carbon dioxide emissions associated with energy sold to HCE consumers.