



Glenwood Canyon



Lineworker maintaining lines



CO2 EMISSION REPORT

WHO WE ARE

Holy Cross Energy (HCE) is a cooperative electric association serving the needs of rural communities in central and western Colorado. The majority of our members are located in the counties of Eagle, Garfield, and Pitkin and we also provide electrical service to a few properties in Gunnison and Mesa counties.

Our headquarters facility is located in Glenwood Springs. In addition, we have three outlying offices located in Aspen, Avon and Gypsum. HCE provides power to nearly 60,000 meters from 11 substations with more than 3,000 miles of distribution and transmission lines.

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.

We have long term purchase power agreements with a number of small clean and renewable generators located in and near our service territory, including 6 small hydroelectric generators, 5 small commercial solar arrays, a 12 MW biomass plant, and 4 community owned solar arrays. We also made short term economy purchases from Black Hills Power and Xcel Energy in 2018. The short-term purchases from Xcel significantly increased the share of our members loads served with wind resources in 2018. A 145 kW solar array provided bill credits to low and moderate income HCE members at no cost to participants.

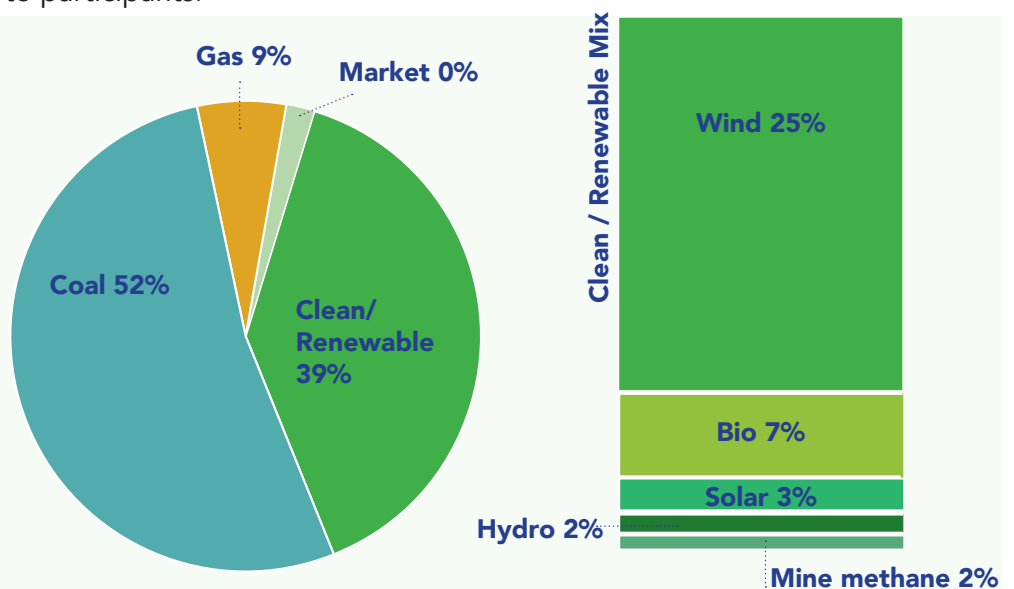
Wood chips collected from beetle kill pine trees to be used at the biomass plant in Gypsum, Co.



HCE owns an 8% share in Unit 3 at the Comanche Generating Station located in Pueblo, CO. This 750 MW super-critical, coal-fired generating unit became operational in July of 2010 and provided approximately 37% of Holy Cross's energy needs in 2018.

About 39% of the energy used to meet member load was supplied through clean and renewable resources, such as wind, solar, hydro, biomass, and coal mine methane generation. 52% came from coal, 9% came from gas, and less than 1% was from market sources which could not be identified with a high level of certainty.

2018 ENERGY BY FUEL





*Next era energy wind
in Northern Colorado purchased
by Xcel and sold to HCE*

Emissions in 2018 were 26% lower than when tracking began in 2005 while sales were 15.6% higher. 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 2018 was 1.19 lb per kWh.

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. 13,981 MWh was purchased by 1,625 HCE members in 2018. In addition, HCE's members installed 1,234 small renewable energy generators (such as solar panels) behind their meters by the end of 2018. The 9,763 kW of distributed generation produced about 11,973 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. 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 2018, or the equivalent of 71,576 MWh. 457,257 MWh (36%) of HCE power supply came from sources which qualify for the Colorado RES in 2018, excluding renewable sales to customers under the voluntary pricing programs. Renewable Energy Credits equal to those sales are retired on an annual basis and not used for any other purpose.

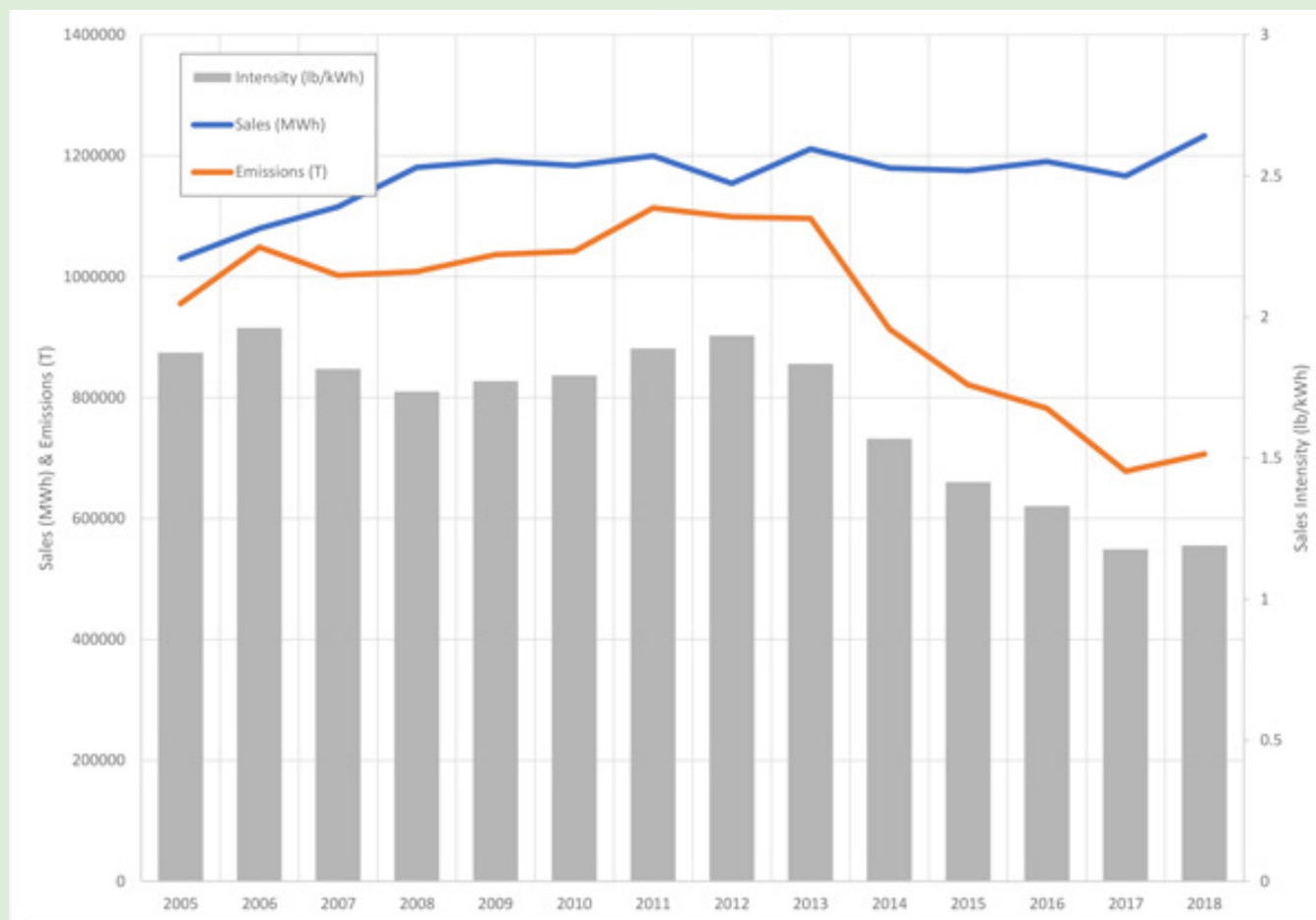
EMISSIONS & RENEWABLE ENERGY

HCE procured 1,257,760 MWh of wholesale and generated power (including estimated generation from net meters) and billed for 1,192,939 MWh to serve consumers' loads. The difference includes transmission and distribution line losses, electricity used in company facilities and electricity provided to net metered customers that was offset under that billing mechanism. The CO2 emissions associated with electric power generation used to serve HCE's customers in 2018 totaled approximately 706,800 short tons. Emissions have decreased by 23% from our 2014 level while sales increased by 1.4%.

TOTAL CO2 EMISSIONS

YEAR	RECEIVED POWER (MWh)	TOTAL SALES (MWh)	RENEWABLE SALES (MWh)	EMISSIONS (Short tons)
2018	1,257,760	1,192,939	13,981	706,800
2014	1,240,374	1,179,789	15,002	919,900
2005	1,080,417	1,032,137	10,501	955,700

SALES & CO2 HISTORY



CO2

Intensity (lb/kWh)

Sales (MWh)

Emissions (T)



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.