

Facilities: 10% Decrease Since 2016

Emissions from the operation of Midpen's facilities result from electricity, heating fuels (natural gas and propane), solid waste (trash, recycling, and compost), and wastewater.

Emissions for this sector made up 14% of total administrative emissions in 2022 and decreased 10% from 2016 to 2022. Primary drivers were:

- Continued use of renewable and zero-carbon energy plans
- An increase in renewables in the standard PG&E electricity mix
- Natural gas emissions have increased since 2016, but decreased compared to 2020 because of improved energy efficiency at the remodeled 5050 El Camino office.

Electricity: 93% Decrease Since 2016

Electricity emissions decreased by 93% from 2016 to 2022. The decrease is primarily from the purchase of 50% renewable electricity from Peninsula Clean Energy and Silicon Valley Clean Energy, which began in 2017. These "community choice energy" providers purchase power from renewable and carbon-free² sources, offering 50% and 100% renewable alternatives to the standard mix provided by PG&E. The 50% renewable default plans have only slightly higher emissions factors than the opt-in 100% renewable options offered by these providers, because all electricity sources for both plans are carbon-free. The 2020 inventory report stated that Midpen switched most facilities to 100% renewable electricity in January 2019, however, during the 2022 inventory it was determined that only a few facilities were opted in to 100% renewable plan. Due to the minimal emissions of the 50% renewable service, the impact of this error was small, and the revised electricity emissions for 2020 increased only 2 MTCO₂e. All accounts except Skyline Field Office were switched to 100% renewable in early 2023.

Skyline Field Office remains on PG&E because it lies very close to the county line and the two counties' community choice programs disagree about who should cover that address. Repeated attempts to enroll have been unsuccessful. Fortunately, PG&E's default electricity mix has incorporated significantly more renewables since 2016. In 2021 (the most recent data available) PG&E's electricity came from 48% renewable sources, 39% nuclear, 9% natural gas, and 4% large hydroelectric. Staff are considering enrolling Skyline Field Office in the PG&E "Solar Choice" program which would provide 100% solar electricity to that facility, similar to the 100% renewable options from the community choice providers.

² Carbon-free sources include large hydropower and nuclear, which are not considered renewable by the state of California, but which nonetheless have a minute carbon footprint compared to fossil fuels. The main renewable sources of electricity in California are solar and wind.

