

CARBON DIOXIDE (CO₂) EMISSION INTENSITIES

2022



We were the first major U.S. power provider with a company-wide vision to deliver 100% carbon-free electricity by 2050. Since 2005, we've reduced carbon emissions 53%. We remain committed to lowering emissions as quickly as possible while maintaining reliable, secure energy and keeping costs as low as possible for our customers.

Our 2022 results show we're more than halfway to that goal and are on pace to achieve an aggressive interim goal of reducing carbon emissions 80% by 2030 from the electricity serving customers across our eight-state service area.

To help you calculate the carbon emissions associated with your electricity use, we provide several options for CO₂ intensities to meet your needs.

1. The basic calculation: lbs/kWh = lbs of CO₂

REGION	2021	2022
	CO ₂ Intensity lbs/kWh	CO ₂ Intensity lbs/kWh
Colorado	1.032	0.966
Texas and New Mexico	1.006	0.976
Upper Midwest (Michigan, Minnesota, North Dakota, South Dakota, Wisconsin)	0.655	0.604

Intensities provided here are based on CO₂ emissions from all electric generation, including biomass and on-site, distributed solar.

2. Customers reporting emissions under The Climate Registry, World Resources Institute or ISO protocols should use the following emissions intensities for Scope 2 market-based reporting.

REGION	2021		2022	
	CO ₂ Intensity (mt/MWh)	CO ₂ Intensity (lbs/MWh)	CO ₂ Intensity (mt/MWh)	CO ₂ Intensity (lbs/MWh)
Colorado	0.470	1,037	0.447	986
Texas and New Mexico	0.456	1,006	0.442	976
Upper Midwest (Michigan, Minnesota, North Dakota, South Dakota, Wisconsin)	0.285	627	0.275	607

Per The Climate Registry's Electric Power Sector Protocol, intensities provided here exclude CO₂ from biomass generation and are adjusted for the sale or purchase of renewable energy credits. Option A biogenic metrics are available upon request.

3. For some customers, their greenhouse gas accounting calls for “residual mix” carbon emission intensities, provided below. These intensities use the same emission reporting data as the other intensities, but they exclude electricity associated with Renewable Energy Credits or RECs that we sold to the market, purchased or retired on behalf of customers participating in Windsource® and Renewable*Connect®.

REGION	2021		2022	
	CO ₂ Intensity (mt/MWh)	CO ₂ Intensity (lbs/MWh)	CO ₂ Intensity (mt/MWh)	CO ₂ Intensity (lbs/MWh)
Colorado	0.477	1,053	0.449	990
Texas and New Mexico	0.456	1,006	0.443	976
Upper Midwest (Michigan, Minnesota, North Dakota, South Dakota, Wisconsin)	0.286	631	0.277	612

Residual mix intensities are calculated using The Climate Registry’s Electric Power Sector Protocol optional delivery metrics and exclude CO₂ from biomass generation.

About Xcel Energy’s Greenhouse Gas Emissions Reporting

For well over a decade, we have supported timely, transparent public reporting of carbon dioxide and other greenhouse gas emissions. We joined The Climate Registry as a founding member in 2007 to help establish a consistent, transparent standard for calculating, verifying and reporting greenhouse gases. Our reporting is based on The Climate Registry and its Electric Power Sector Protocol, which aligns with the World Resources Institute and ISO 14000 series standards.

We have consistently measured our progress using a 2005 baseline, which is the first year we began measuring and tracking our greenhouse gas emissions. 2005 is also a common baseline year for national and international standards. For 15 years (2005 through 2019), we have third-party verified, registered and publicly disclosed our carbon dioxide emissions through The Climate Registry and are the only power company with this length of consecutive, verified reporting. Our greenhouse gas emissions for 2020 through 2022 are currently undergoing third-party verification. Emissions for these years are considered preliminary until verification is complete.

