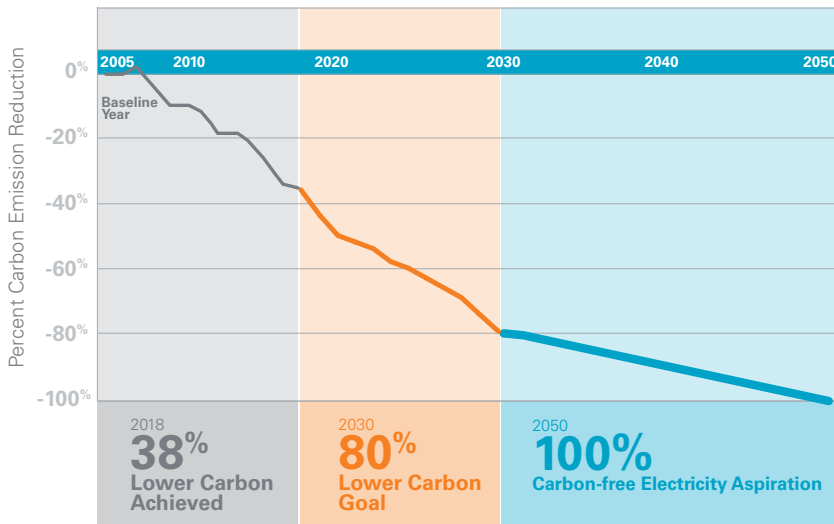


BUILDING A CARBON-FREE FUTURE

A BOLD VISION FOR 2030 AND 2050



Our Goals and Progress to Date



Climate modeling experts from the University of Denver analyzed our goals and concluded they are consistent with electric sector emissions in scenarios likely to achieve the temperature targets of the Paris climate agreement.







Planning for the future

The “must dos” and drivers that make our environmental goals possible

- Protect energy reliability and affordability**
Our goals rely on maintaining these service fundamentals — focus on achieving the greatest carbon reductions at the lowest cost to customers
- Support from our states and stakeholders**
Implement through state resource plans with stakeholder support
- Advocate for constructive public policy**
Reducing carbon emissions should be the policy objective, and to that end, scale and ownership matter — encourage economical large-scale clean energy development and utility ownership of resources
- Develop carbon-free 24/7 technologies for 2050**
Support research and development now to advance technologies, beyond renewables, that will eliminate the last 20% of carbon from the electricity serving our customers

Achieving 80% by 2030

The pathway to significantly reduce carbon emissions:

-  Adding thousands of megawatts of wind and solar power
-  Incorporating both natural gas and storage resources to balance more renewables
-  Retiring more coal units or changing their operations to reduce emissions
-  Operating our Upper Midwest nuclear plants through their licenses
-  Supporting electrification of certain end uses to create flexible demand
-  Investing in critical infrastructure, such as transmission

Cutting our carbon emissions has other benefits:

- By relying more on clean energy resources, like wind and solar, we significantly lower air emissions and reduce water use
- Cleaner electricity powering cars and trucks, buildings and possibly other uses, can reduce more carbon across our economy, even faster

Learn more about our carbon-free energy future at xcelenergy.com/carbon