

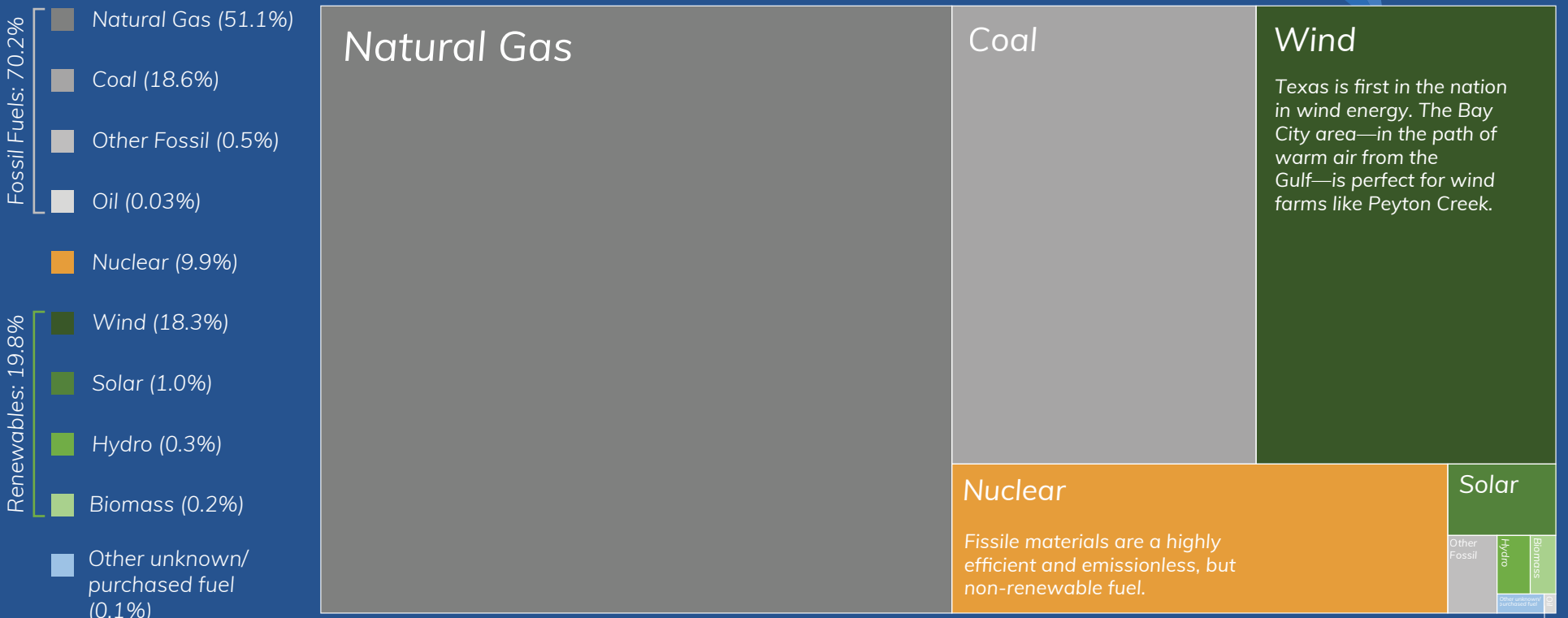
ELECTRICITY EMISSIONS AND EVs IN BAY CITY, TEXAS

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While the push toward electric vehicles (EVs) and other machinery will help reduce tailpipe emissions, it is important to keep in mind that electricity is not emission-free.

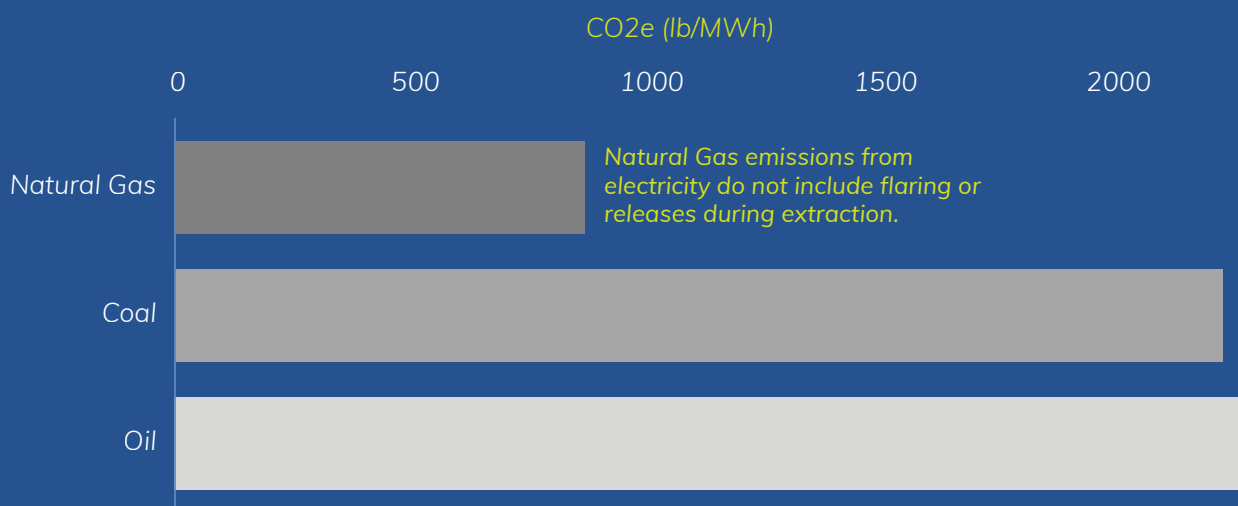
ELECTRICITY GENERATION RESOURCE MIX (ERCOT)

Electricity emissions are dependent on the types of fuel and generation that are available in an electrical grid region. Bay City is part of the grid called the Texas Interconnection, which is managed by Electric Reliability Council of Texas (ERCOT).



FOSSIL FUEL CO₂e EMISSION RATES (ERCOT)

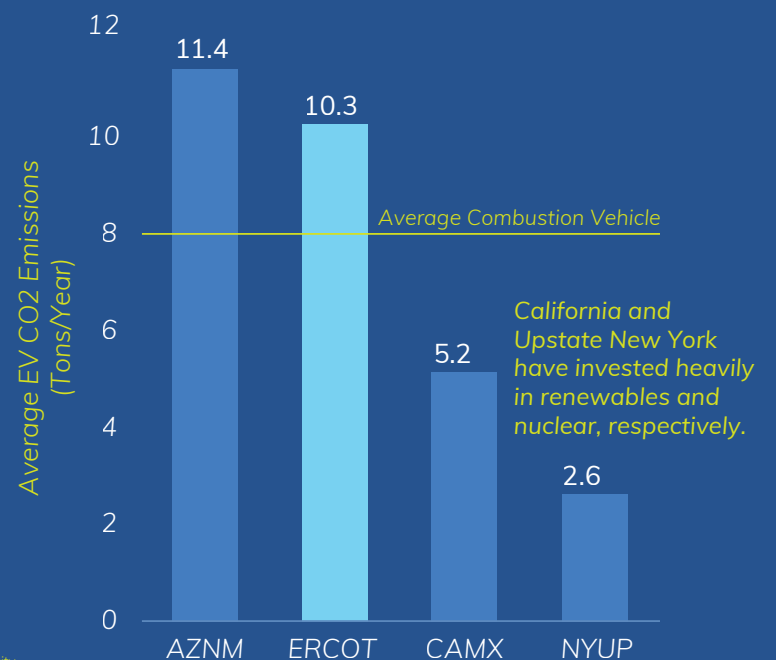
The amount of a greenhouse gas emitted is dependent on the content of that gas's chemical components in the fuel. Different fossil fuels have different chemical makeups, so they have different rates of emission. Emission rates also vary per grid, which depends on any emission "scrubbing" technology employed in that region.



BAY CITY EVs ON OTHER GRIDS

Grid region differences in resource mix and emission rates affect emissions at the city level. The electricity emissions of Bay City would look different if it were on the Arizona/New Mexico, California, or Upstate New York grids. This, in turn, affects whether a switch to electric vehicles would result in a net reduction of greenhouse gas emissions.

Switching to an EV may not necessarily eliminate or reduce emissions. In Bay City, a switch to EV may actually produce more CO₂! If you are eager to reduce transportation emissions with EVs, the arena shifts from the car companies to the power companies. You can contribute to improving the benefit of EVs with your voice in town hall meetings, your vote in elections (especially local), and your dollar at the meter.



Sources: EPA.gov: <https://www.epa.gov/energy/power-profiler#ERCOT>, <https://www.epa.gov/energy/data-explorer>, <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>, <https://www.eia.gov/state/analysis.php?sid=TX#5>, <https://www.eia.gov/tools/faqs/faq.php?id=73&t=11>, Bay City: <https://www.cityofbaycity.org/399/HB-3693>, Bay City Tribune: https://baycity-tribune.com/community/article_cfe113d6-4ce6-11e9-b8f5-b3afd8796baf.html, C2es.org: <https://www.c2es.org/content/reducing-your-transportation-footprint/>