



In this summary we provide the AEP system-wide and operating company specific greenhouse gas emission rates which can be used to calculate emissions associated with customer's 2017 and 2018 energy use. For information on AEP's sustainability performance and strategy for a clean energy future, please visit www.AEPsustainability.com.

AMERICAN ELECTRIC POWER EMISSIONS RATES*

	2017 CO ₂ e Intensity lbs. / kWh	2018 estimate CO ₂ e lbs. / kWh
American Electric Power System-wide	1.62	1.60
AEP Ohio**	1.04	1.02
Appalachian Power	1.96	1.87
Indiana Michigan Power	0.75	0.80
Kentucky Power	2.25	2.30
Wheeling Power	2.36	2.52
Public Service Company of Oklahoma	1.04	1.17
Southwestern Electric Power Company	2.03	2.08
AEP Texas**	1.15	1.01

* Emission rates are carbon dioxide equivalent based on AEP's generation mix and IPCC FAR5 100 year global warming potential. Emission rates are adjusted to reflect regional emission rates if Renewable Energy Credit were sold in that year.

** Emission rates reflect average emission rate for region as AEP provides wires only service through utilities in these states.

Emissions rates for 2018 are preliminary and may change as estimated data is finalized, checked and quality assured, which should be completed by mid-2019.

HOW TO CALCULATE YOUR EMISSIONS ASSOCIATED ENERGY USE



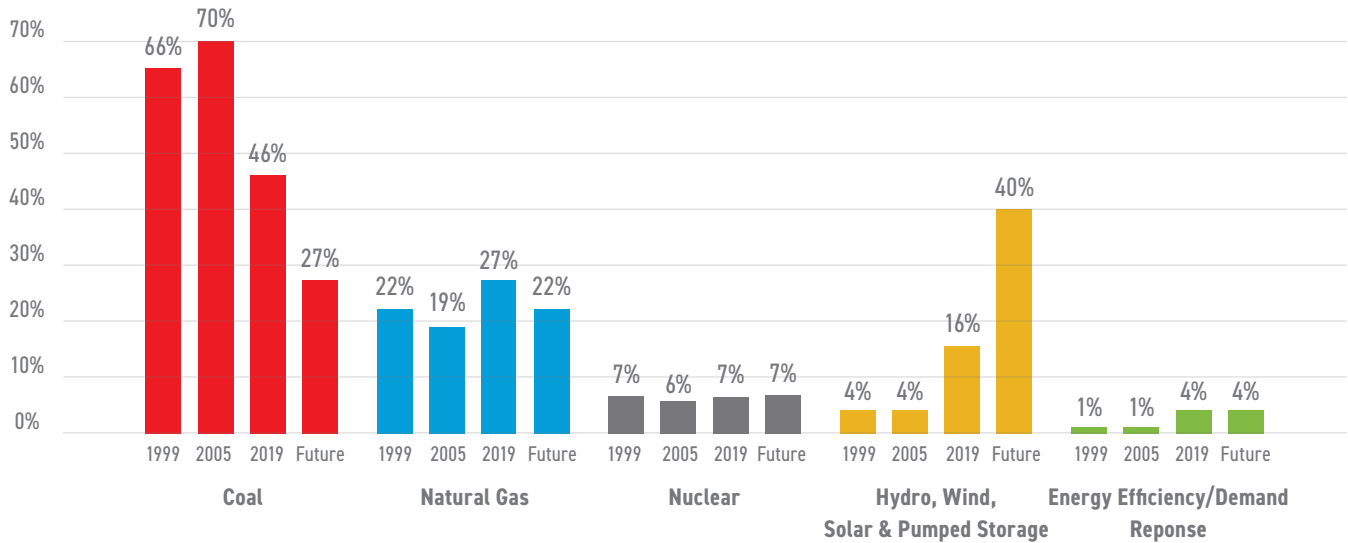
Emissions Rates that can be used to calculate customer emissions associated with annual 2017 & 2018 energy use: **Calculation – CO₂e* Intensity lbs./kWh x Customer's annual kWh usage = lbs. of CO₂e attributed to Customer.**

* CO₂e is a combination of greenhouse gases (CO₂, CH₄, N₂O and SF₆) expressed in term of equivalent carbon dioxide.

This calculation can be used for Scope 2 location-based reporting which adheres to the World Resources Institute (WRI) and World Business Council for Sustainable Development's (WBCSD) reporting protocols.

AEP's greenhouse gas emission rate is based on the World Resource Institute/ World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol for scope 1 (direct) and scope 2 (indirect) emissions. Although not third party certified, the rate is largely (greater than 80%) CO₂ emissions that are certified by the U.S. Environmental Protection Agency.

TRANSFORMING OUR GENERATION FLEET FOR A CLEAN ENERGY FUTURE



2019 includes expected capacity as of year-end 2019. Future includes IRP forecasted additions and retirements through 2030. Energy Efficiency/Demand Response represents avoided capacity rather than physical assets.

AMERICAN ELECTRIC POWER GENERATION PORTFOLIO

(by company)

	2018 MW			
	Coal	Natural Gas	Nuclear	Hydro, Wind, Solar & Pumped Storage
AEP Ohio*	437	—	—	209
Appalachian Power	4,594	1,594	—	1,360
Indiana Michigan Power	1,482	—	2,278	486
Kentucky Power	780	280	—	—
Wheeling Power	780	—	—	—
Public Service Company of Oklahoma	574	4,384	—	1,137
Southwestern Electric Power Company	2,631	2,701	—	469

Owned and Purchase Power Agreements (PPA)

*AEP Ohio is a wires only company but retains rights to limited generation capacity on behalf of customers through PPAs.

As of January 2019.

AEP'S CO₂
EMISSION REDUCTION
GOALS

60%

by 2030

80%

by 2050

(both from a 2000 baseline)

Visit the Energy Conversion Hub and learn how electric technologies are helping companies improve efficiency and lower emissions.

www.energyconversionhub.com

**AMERICAN
ELECTRIC
POWER**

BOUNDLESS ENERGY™