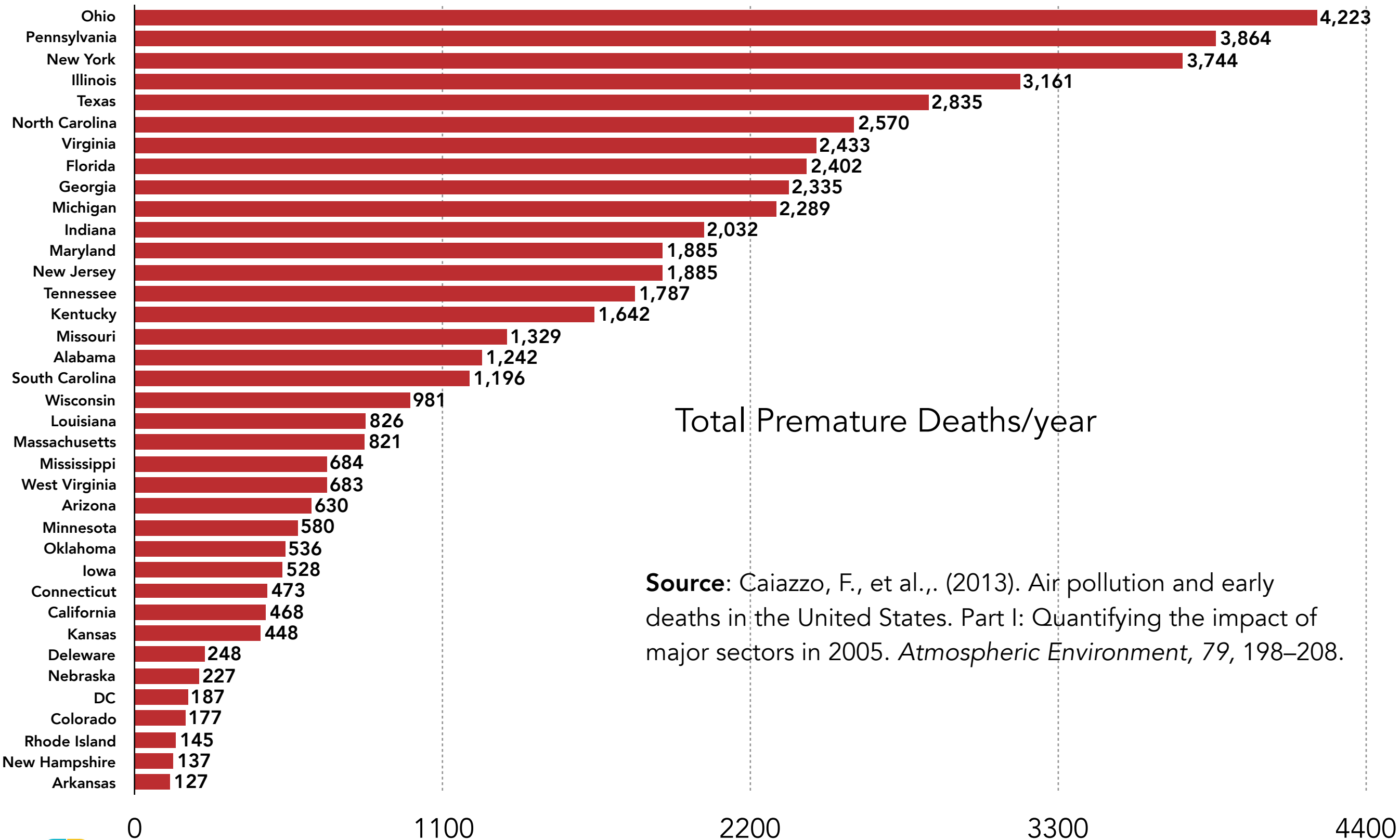




Ohio Energy

Last updated June 26, 2017

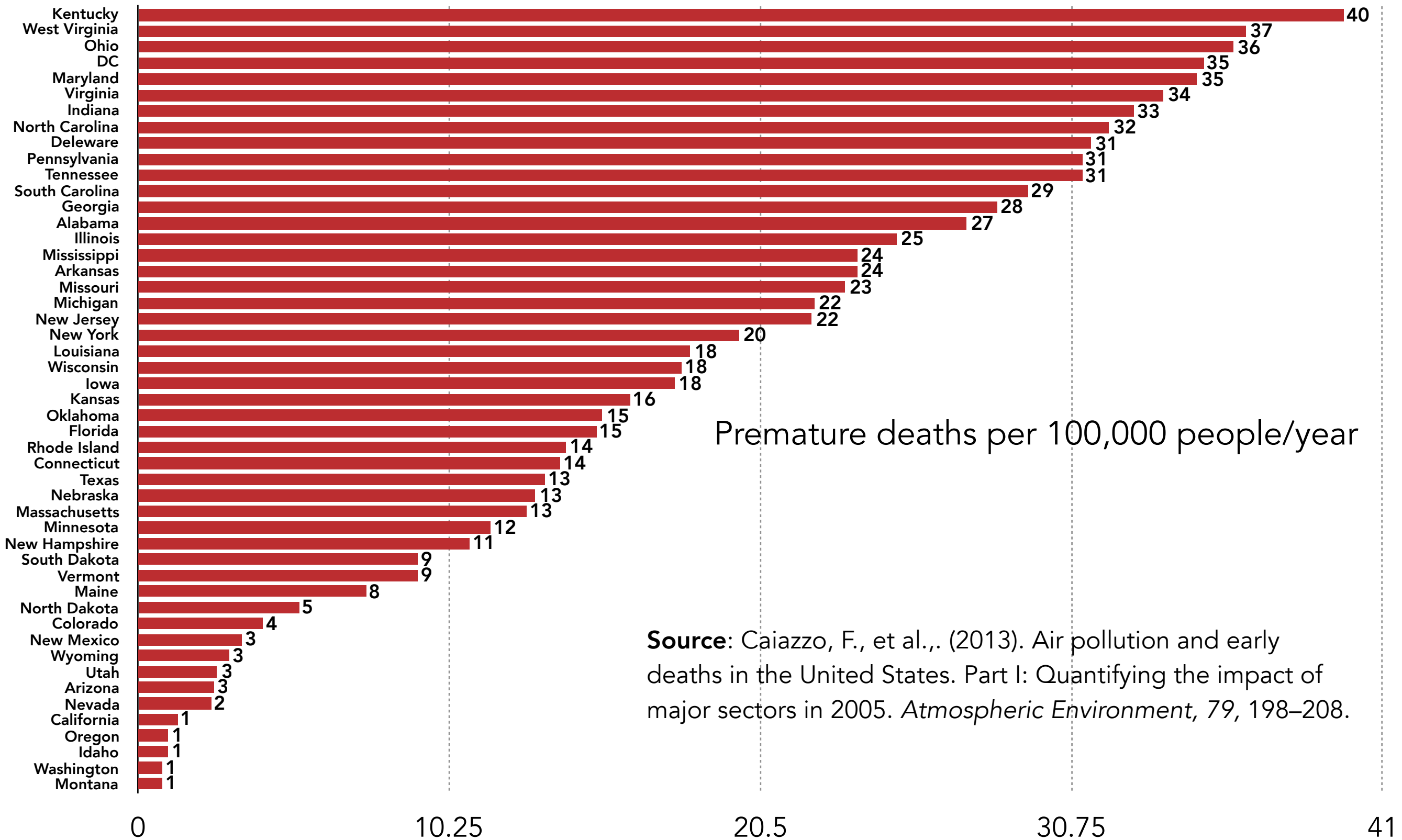
Ohio #1 in premature deaths from particulate matter from electricity generation



Source: Caiazzo, F., et al.,. (2013). Air pollution and early deaths in the United States. Part I: Quantifying the impact of major sectors in 2005. *Atmospheric Environment*, 79, 198–208.



Ohio #3 in premature death rate from particulate matter from electricity generation



Source: Caiazzo, F., et al.,. (2013). Air pollution and early deaths in the United States. Part I: Quantifying the impact of major sectors in 2005. *Atmospheric Environment*, 79, 198–208.

Coal is cause of high particulate matter

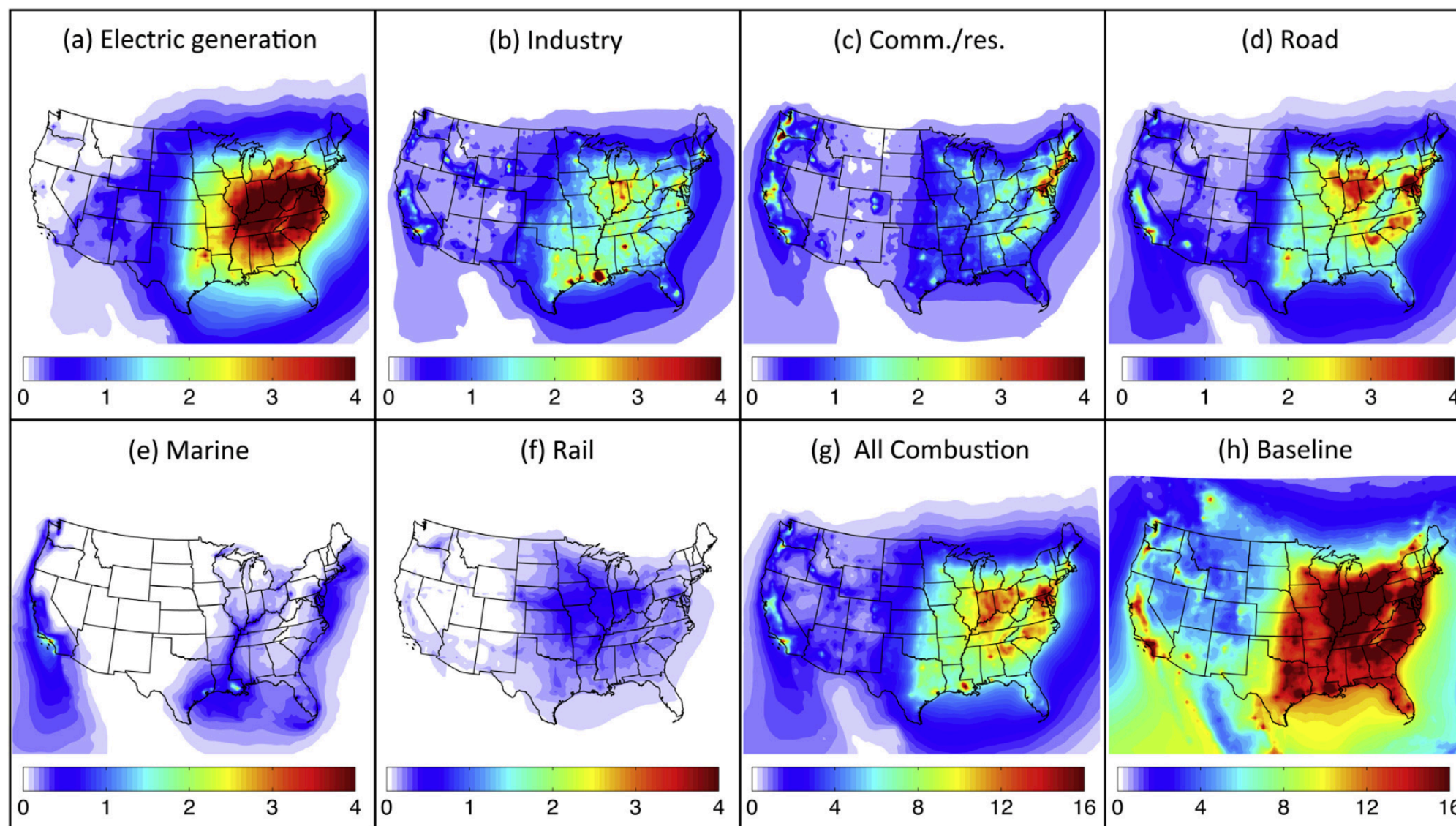
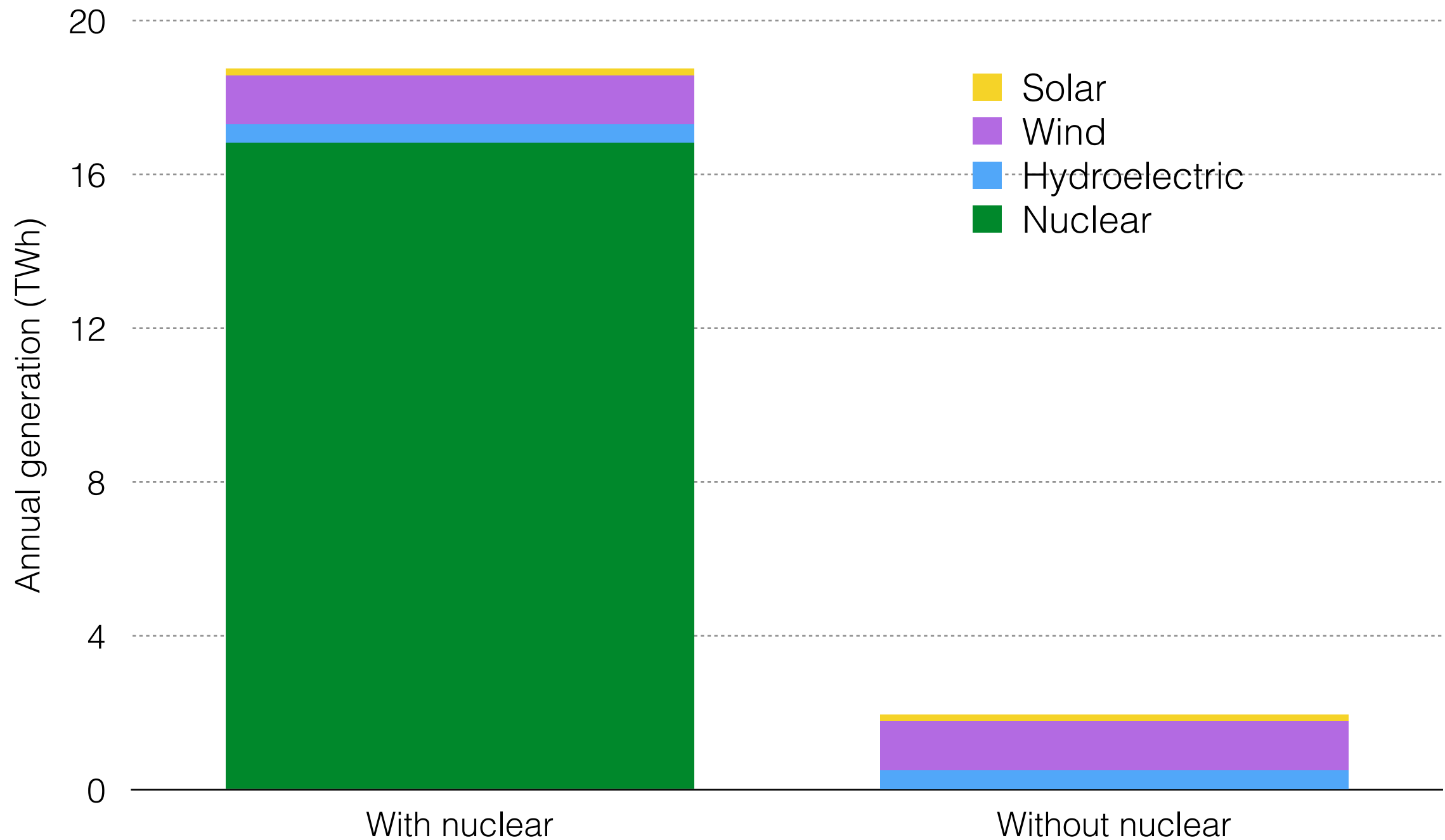
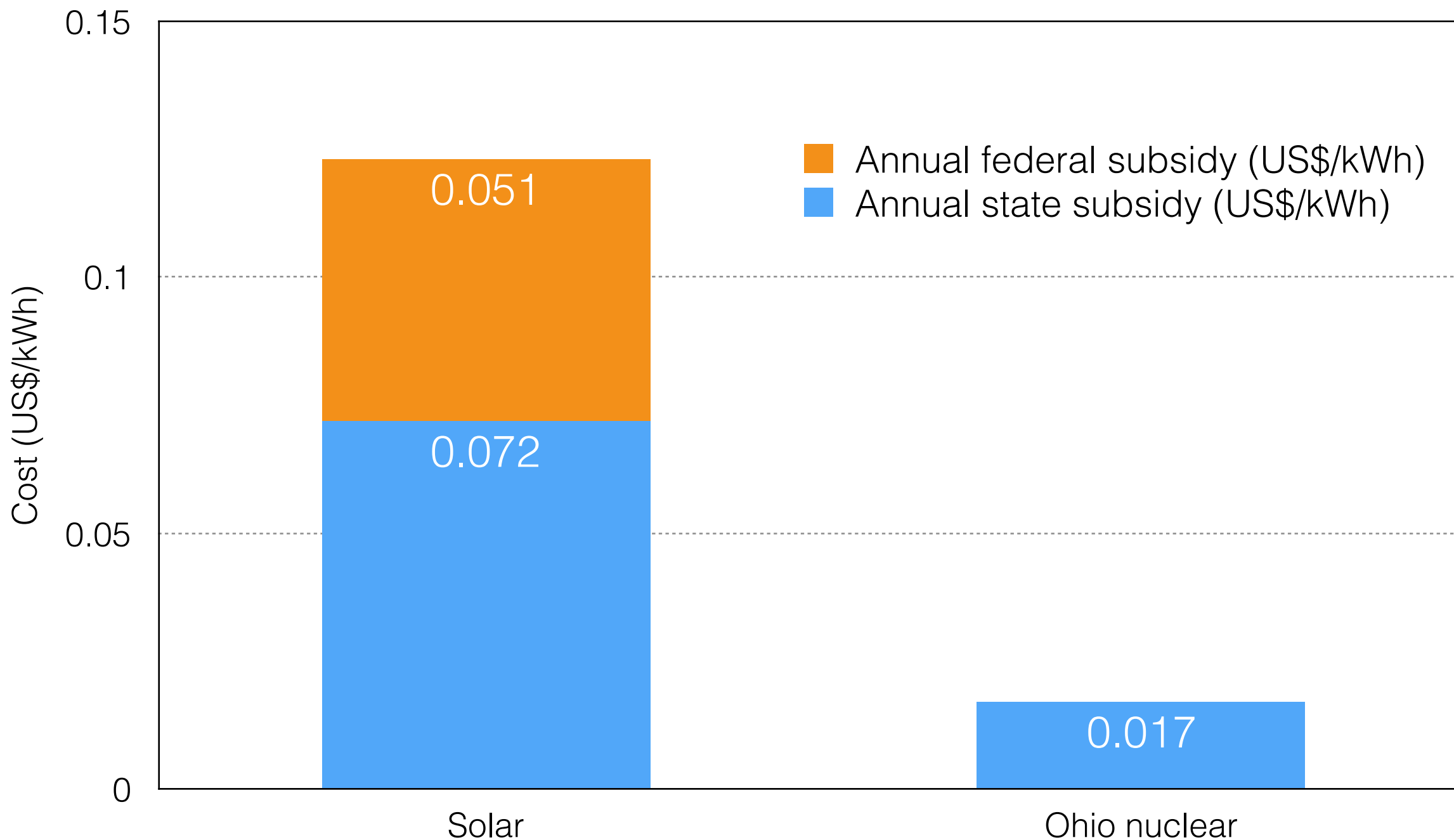


Fig. 1. Annual average ground-level PM_{2.5} concentration ($\mu\text{g m}^{-3}$) from U.S. sources attributable to combustion emissions from (a) electric power generation; (b) industry; (c) commercial and residential sources; (d) road transportation; (e) marine transportation; (f) rail transportation; (g) sum of all combustion sources; (h) all sources (baseline case for this study). A different scale is adopted for (a–f) and (g–h).

Without nuclear, the amount of clean electricity in Ohio will decline 90 percent.



Solar subsidies vs. proposed Ohio nuclear subsidy



Sources: http://www.sretrade.com/srec_markets/ohio

<https://solarpowerrocks.com/ohio/>

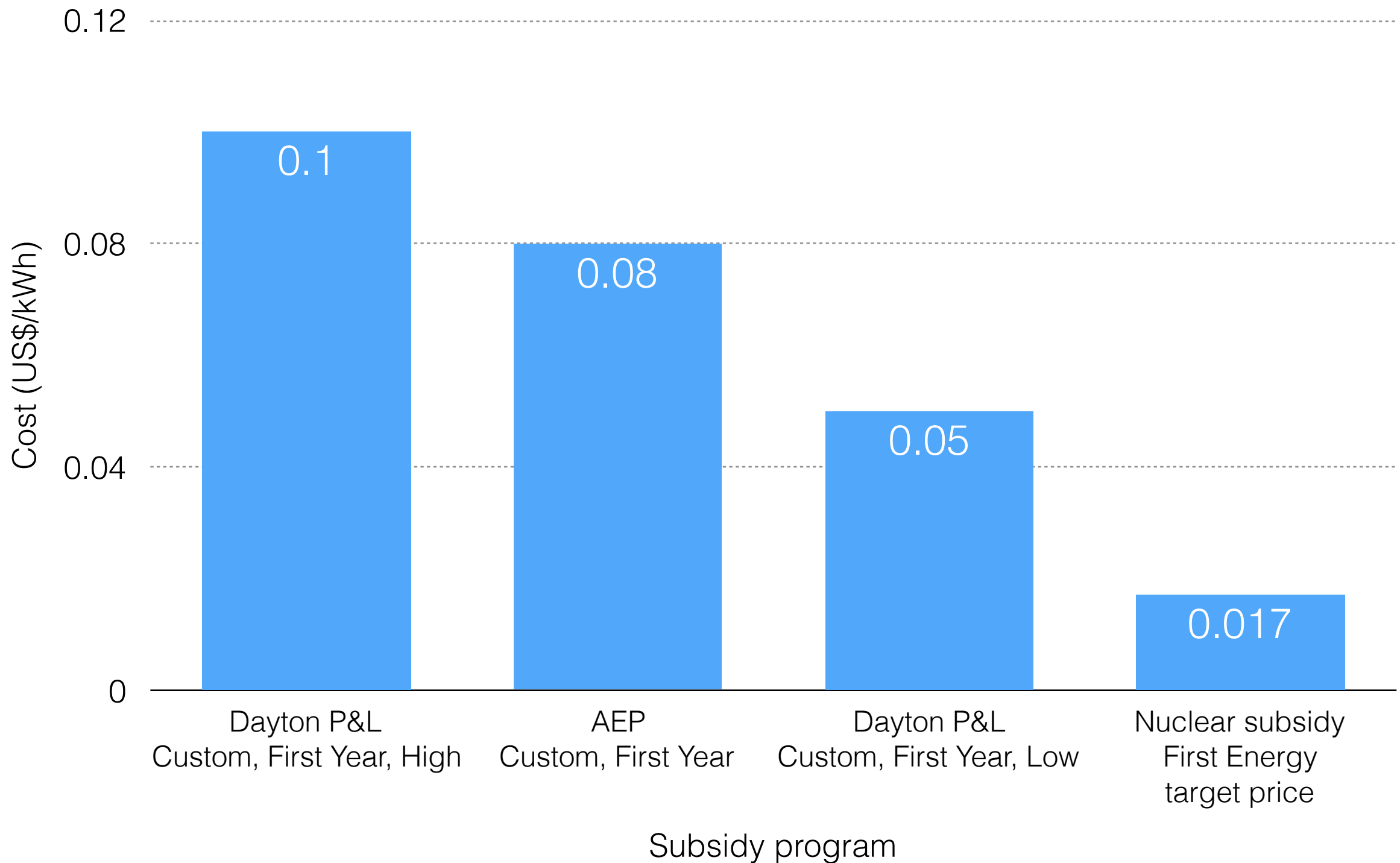
<http://www.utilitydive.com/news/aep-ohio-wholesale-auction-prices-continue-to-decline-stressing-utilities/408870/>

<https://www.eia.gov/electricity/data/browser/#/topic/7?agg=0,1&geo=g0002&endsec=vg&linechart=ELEC.PRICE.US->

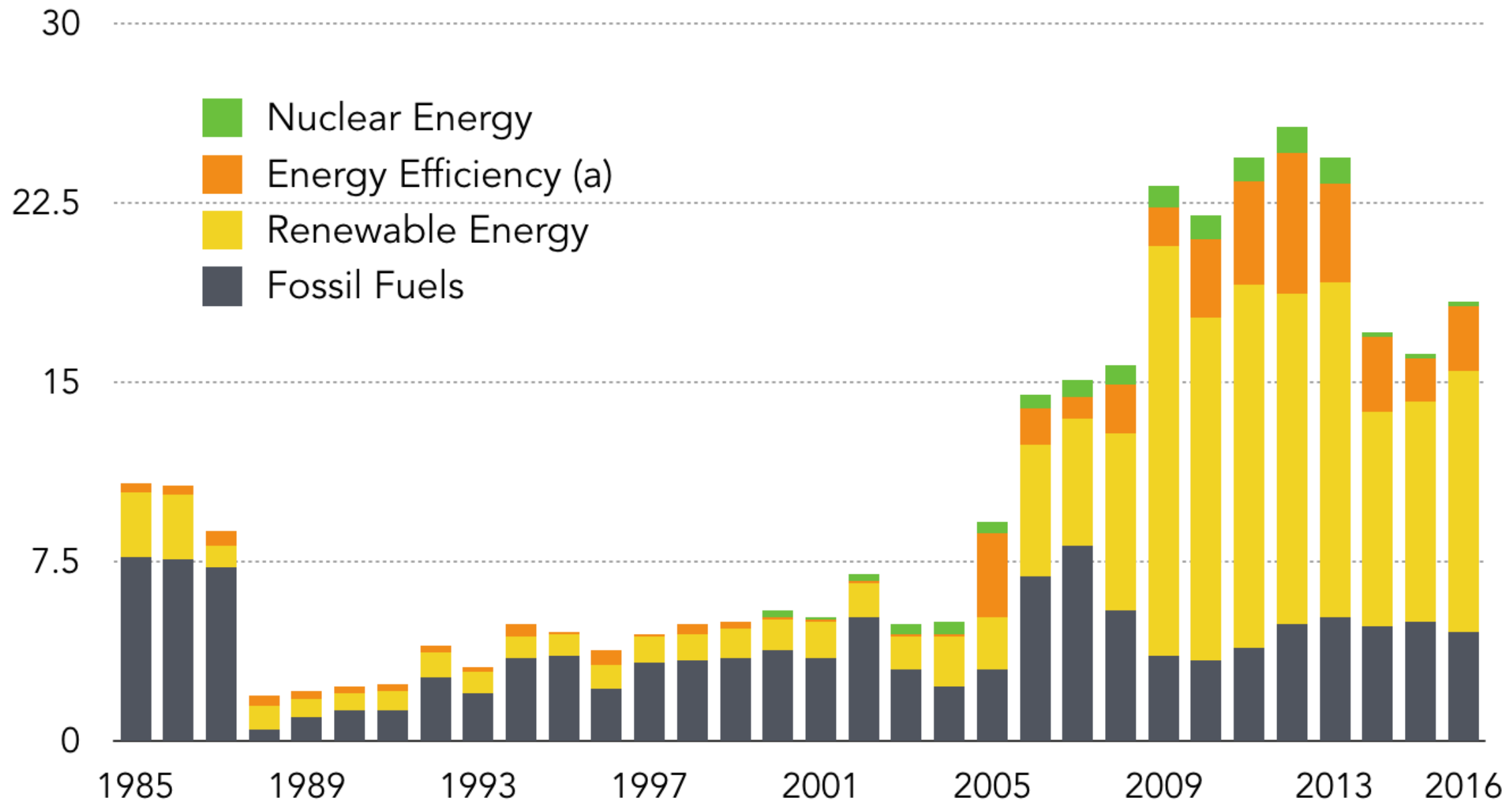
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Ohio energy efficiency subsidies cost up to 6x more per kilowatt hour than the proposed nuclear subsidy.



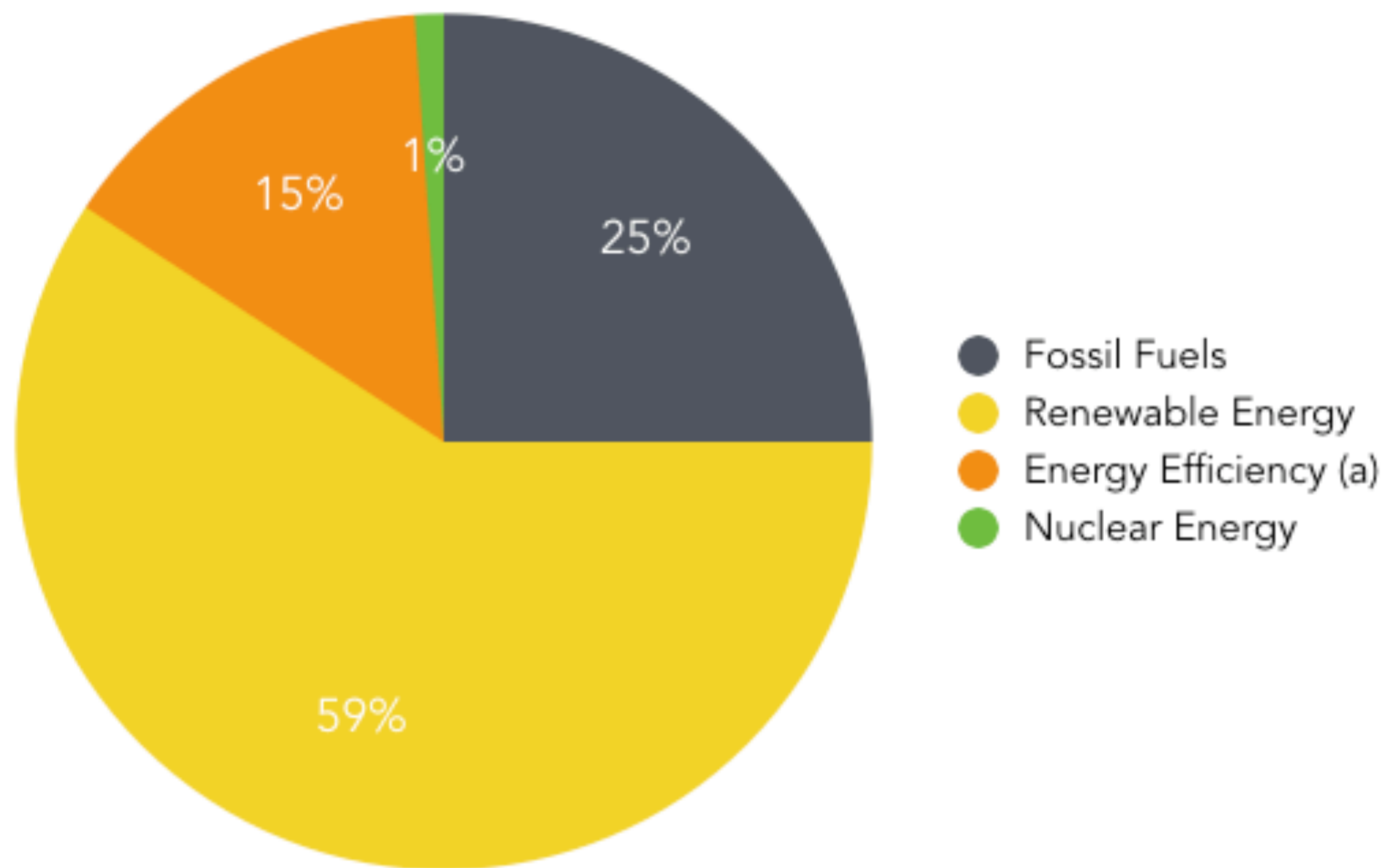
Costs of Energy-Related Tax Preferences, by Type of Fuel or Technology, 1985 to 2016



(a) Includes the costs of tax preferences related to the transmission of electricity, which are typically small.

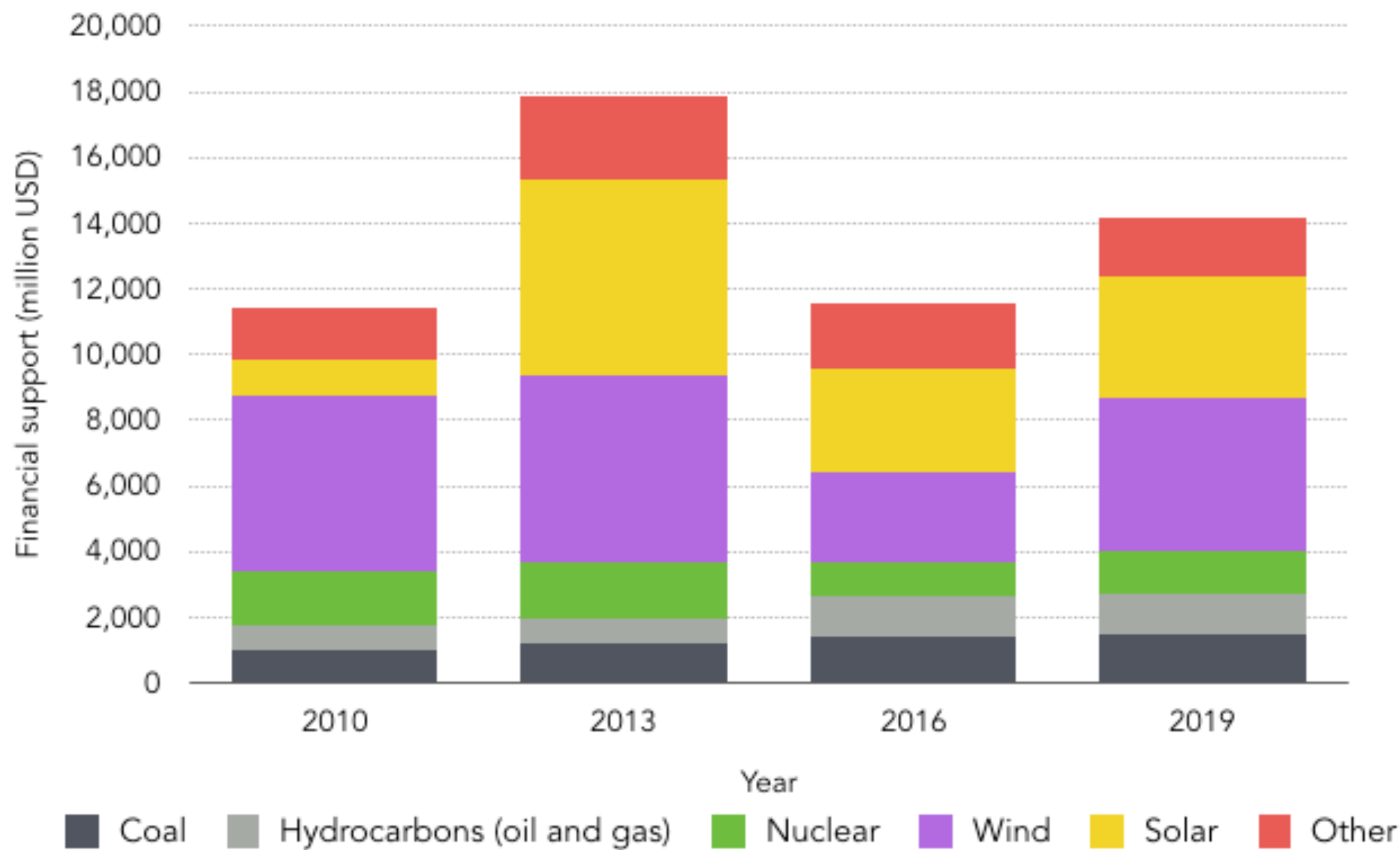
Source: Testimony on federal support for developing, producing, and using fuels and energy technologies: Hearing before the Subcommittee on Energy Committee on Energy and Commerce, U.S. House of Representatives, 115th Cong. (2017) (Terry Dinan, Congressional Budget Office). <https://www.cbo.gov/system/files/115th-congress-2017-2018/reports/52521-energytestimony.pdf>

Costs of energy-related tax preferences, by type of fuel or technology, 2016

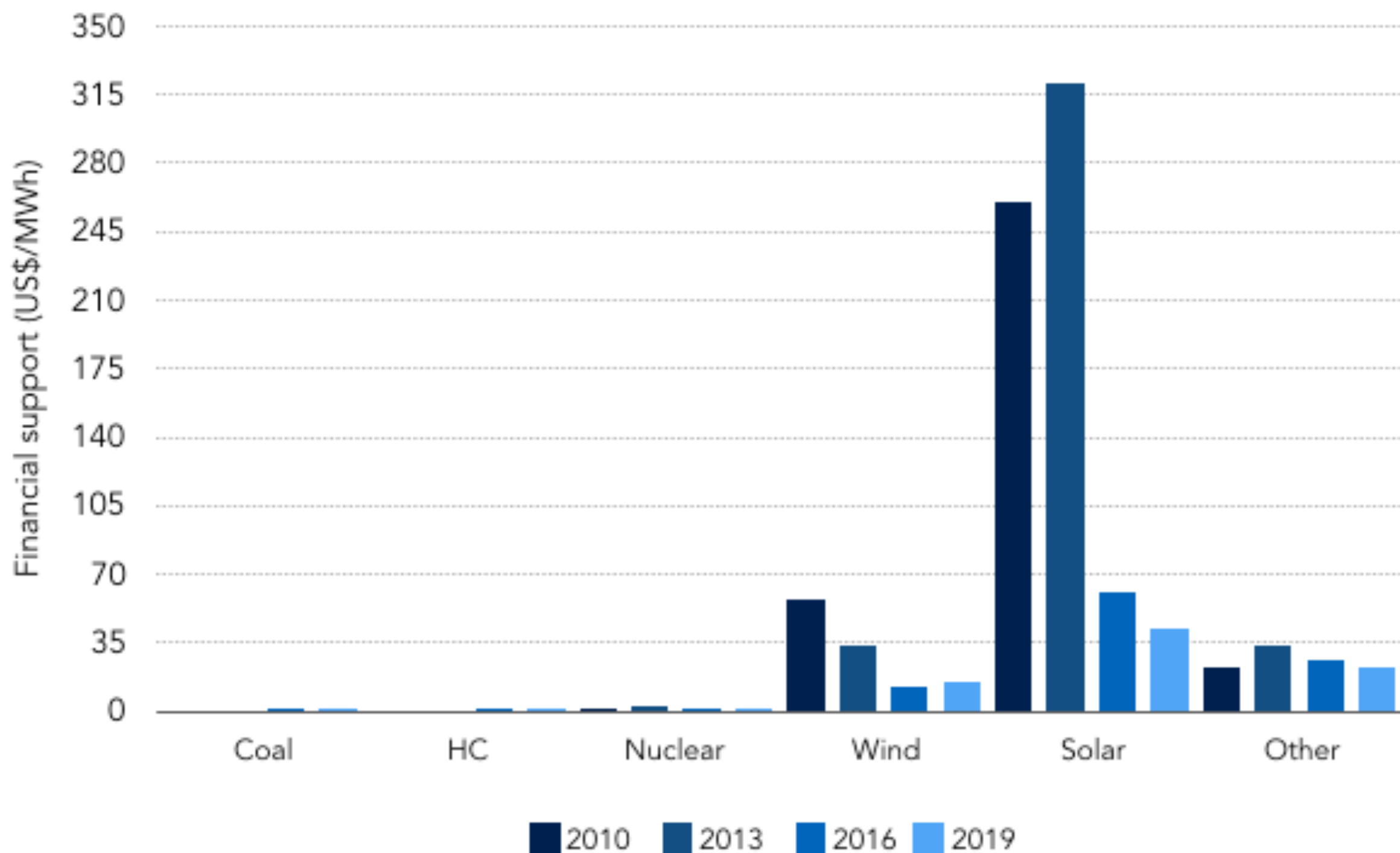


(a) Includes the costs of tax preferences related to the transmission of electricity, which are typically small.

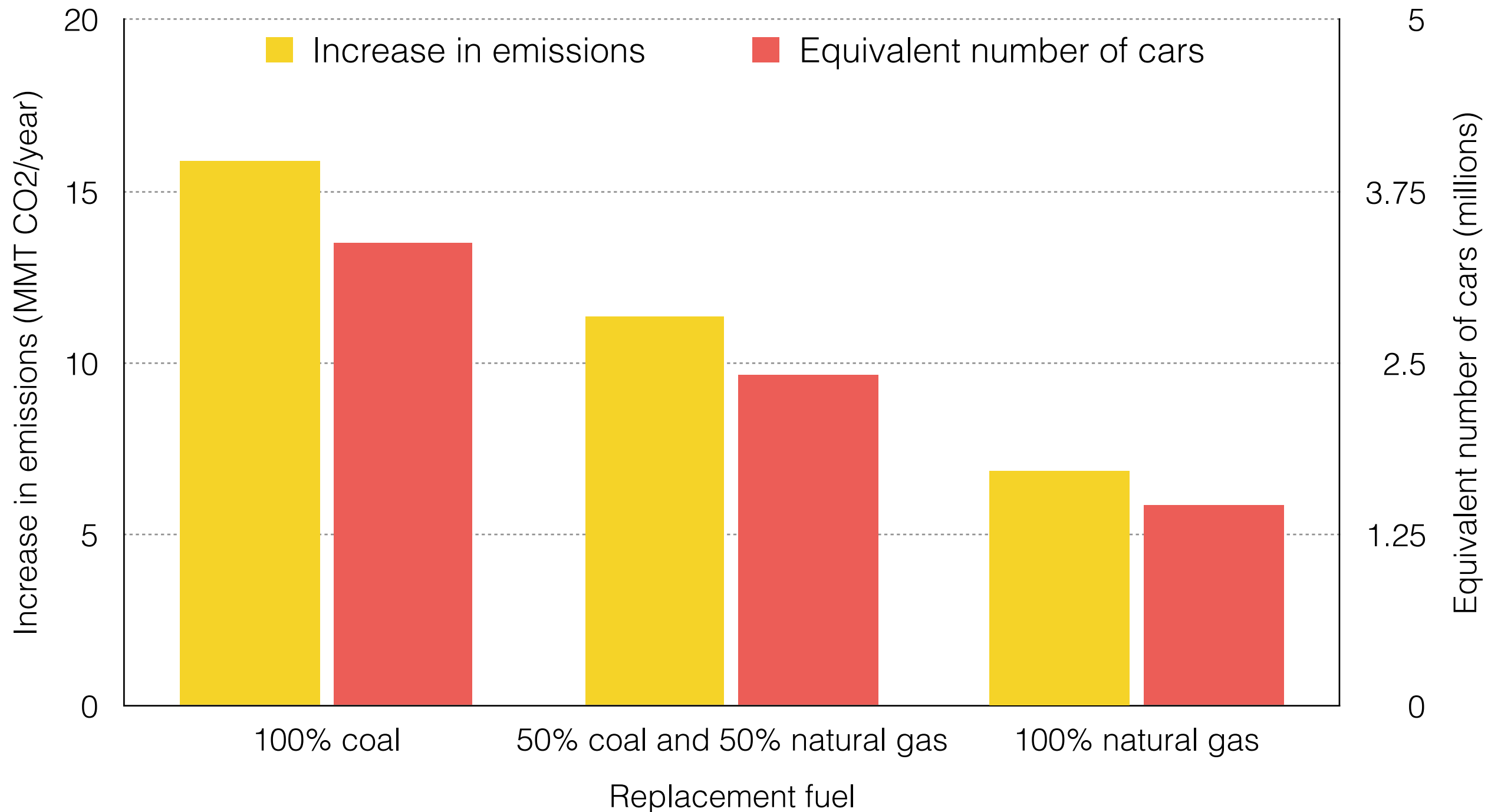
Total federal spending on electricity by fuel type and year



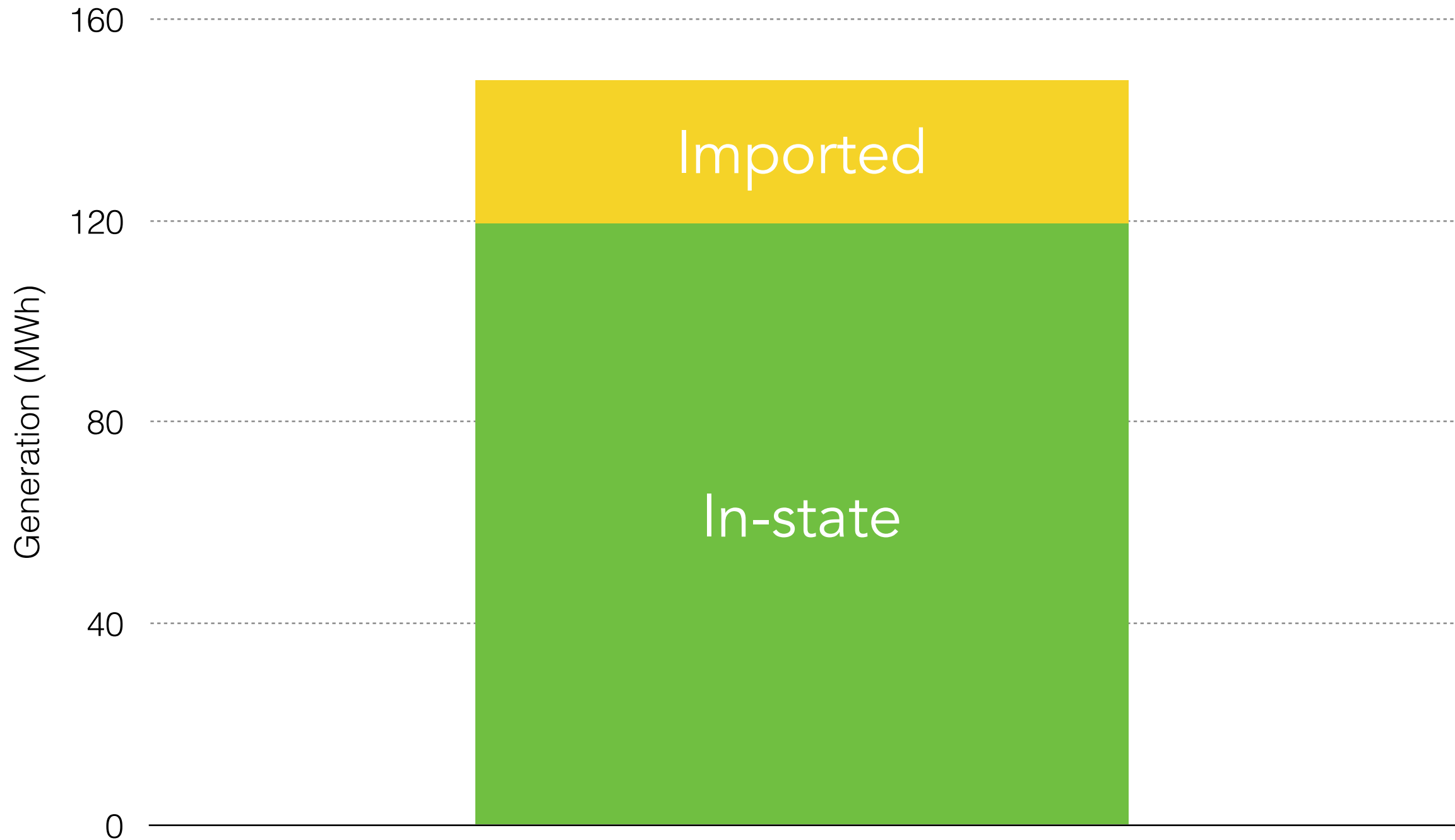
Subsidy by type and fuel per megawatt-hour



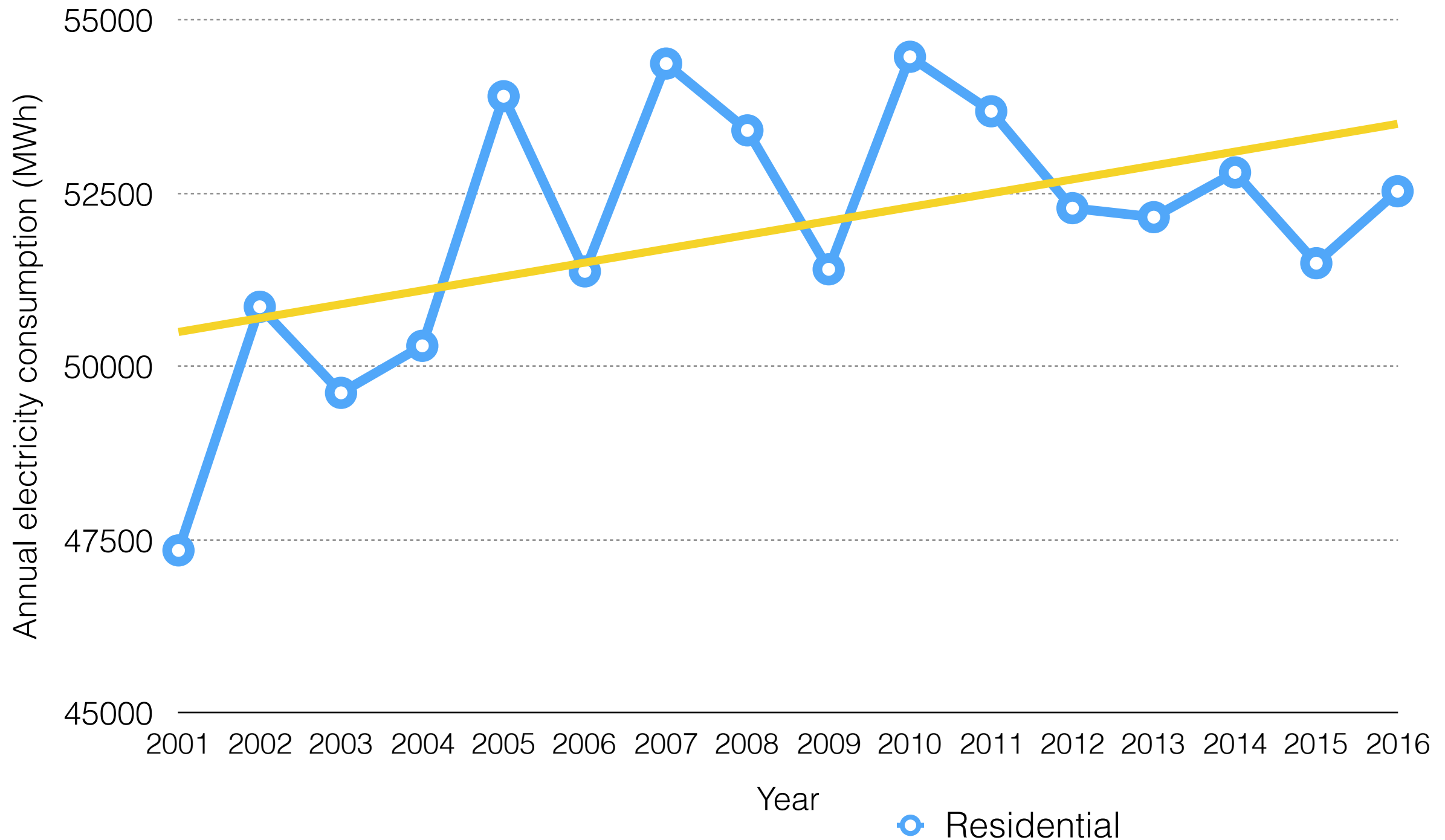
Ohio emissions will increase the equivalent of adding up to 3.4 million cars to the road if Perry and Davis-Besse close.



In 2016, Ohio imported more than 19% of its power.

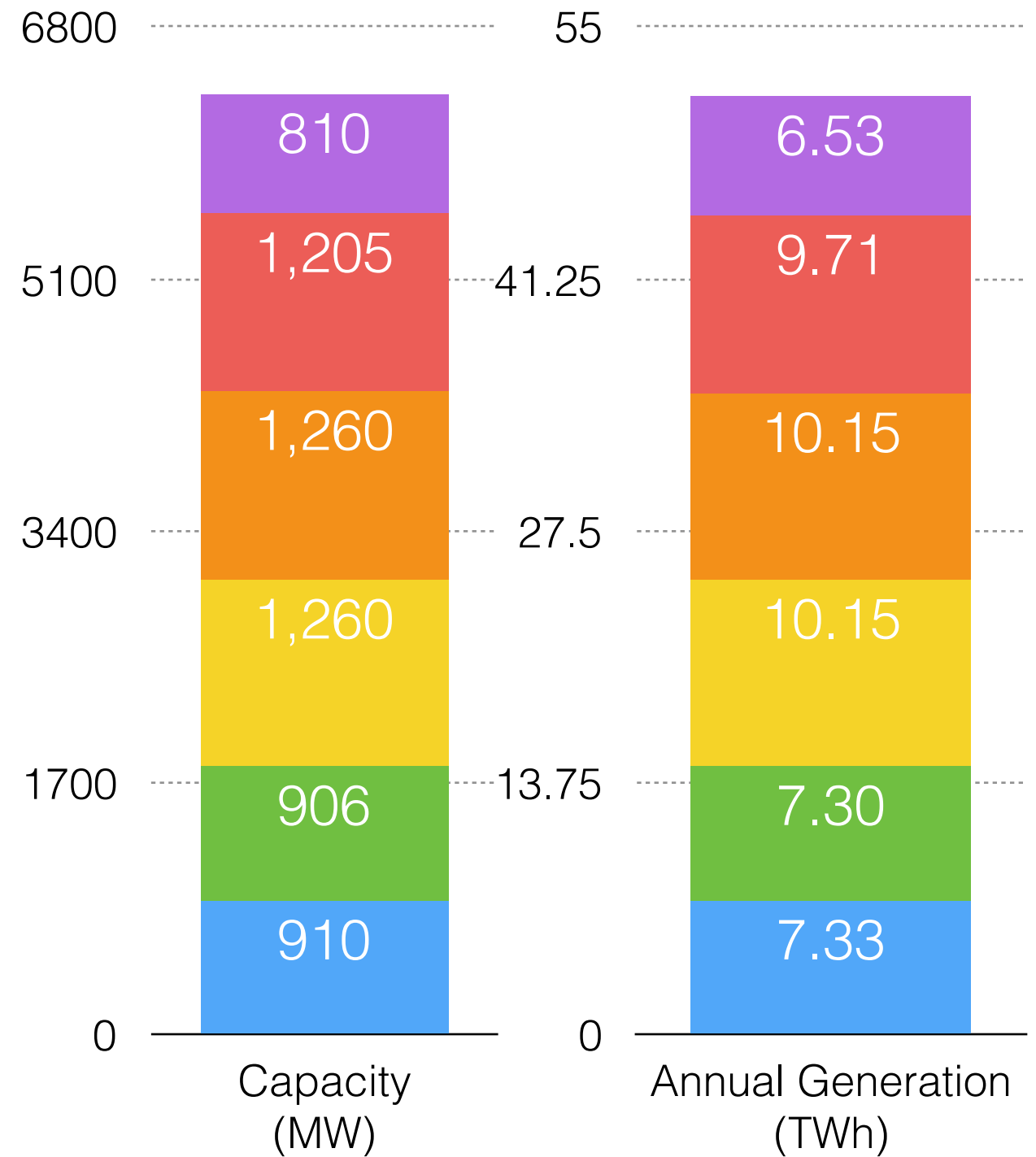


Ohio residential electricity increased despite energy efficiency spending

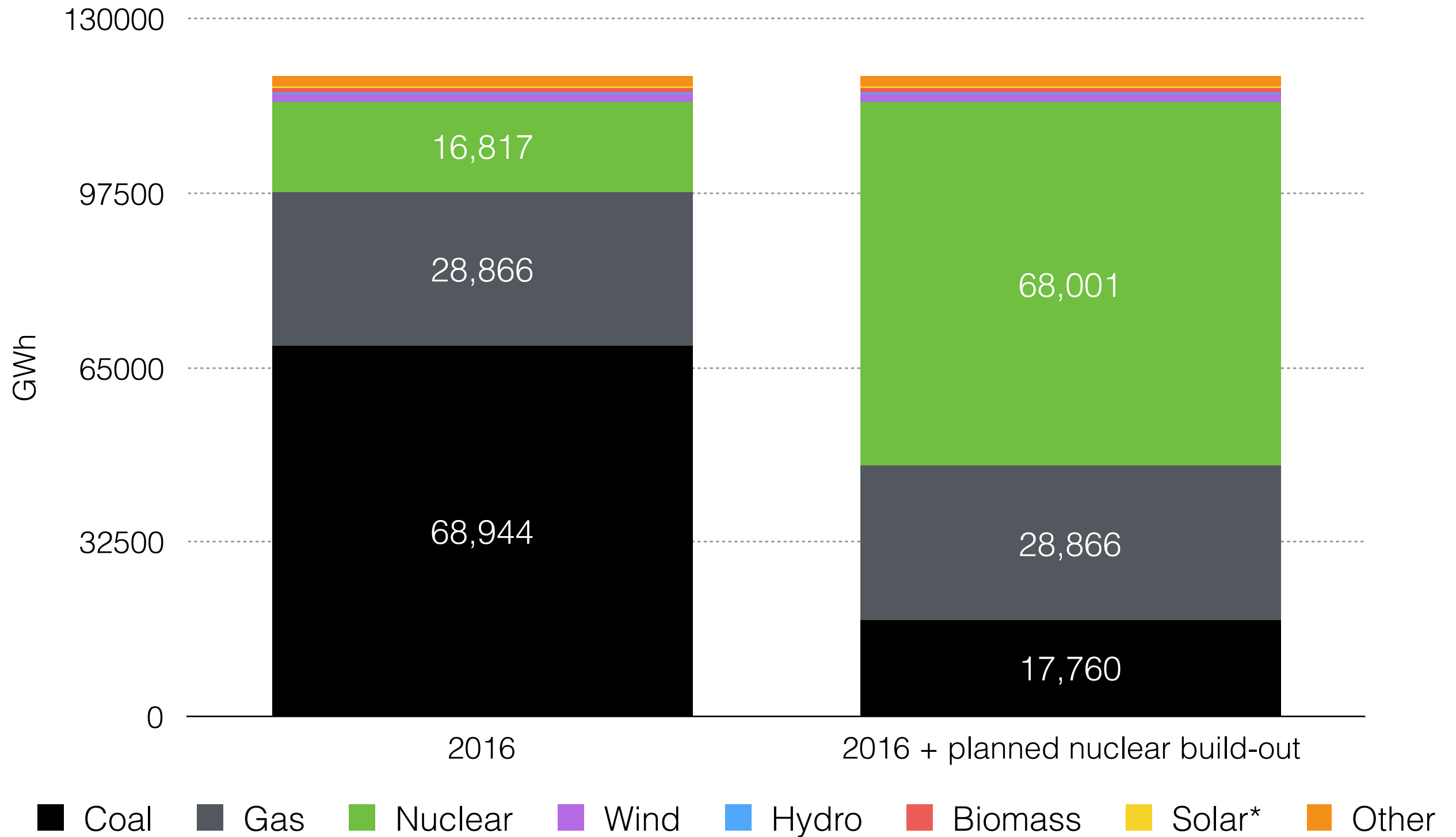


Ohio Nuclear Abandonments

- Zimmer 1 (was under construction)
- Perry 2 (was under construction)
- Erie 2
- Erie 1
- Davis Besse 3
- Davis Besse 2



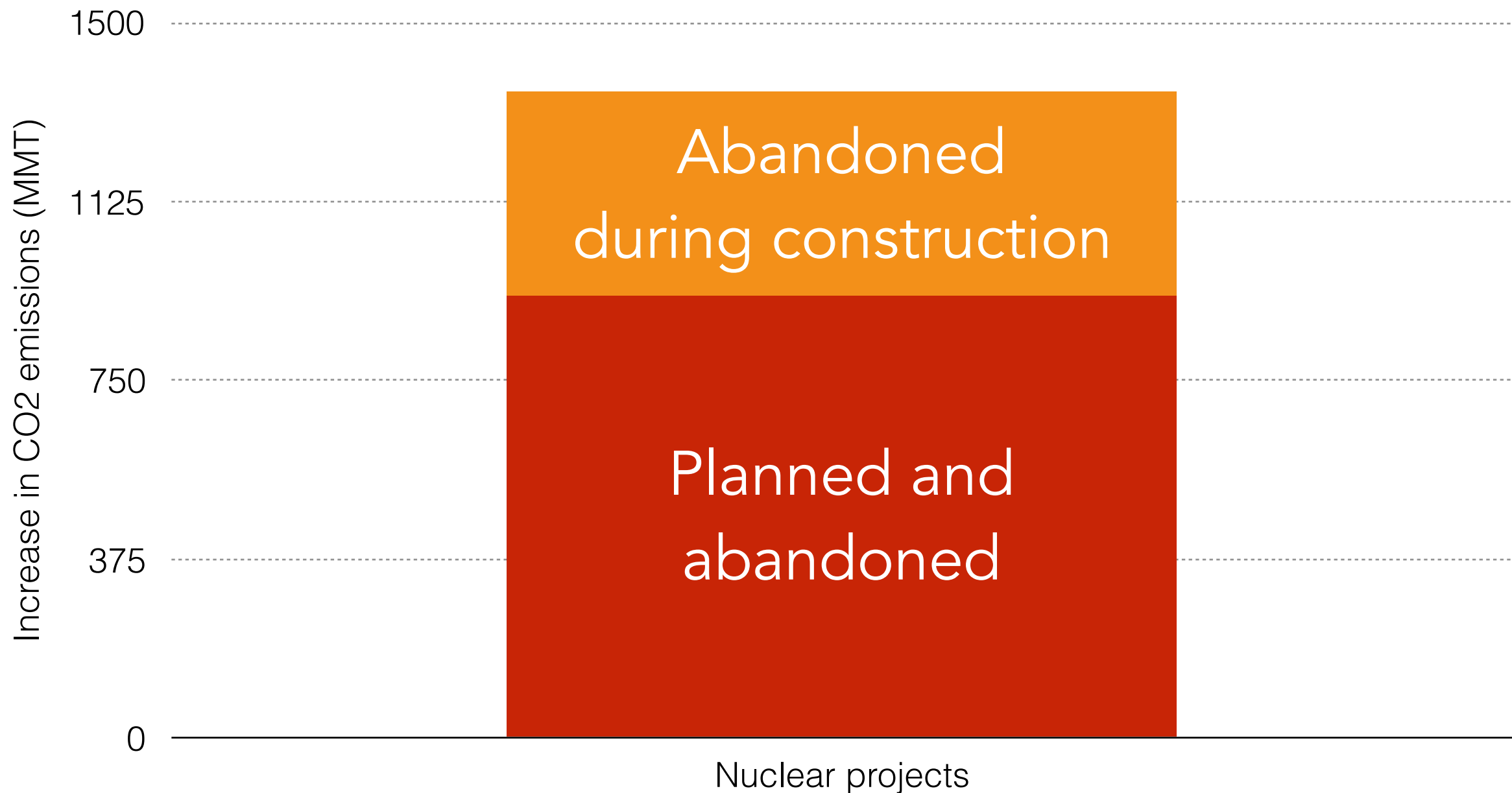
Nuclear Abandonments Locked in Fossil Fuels



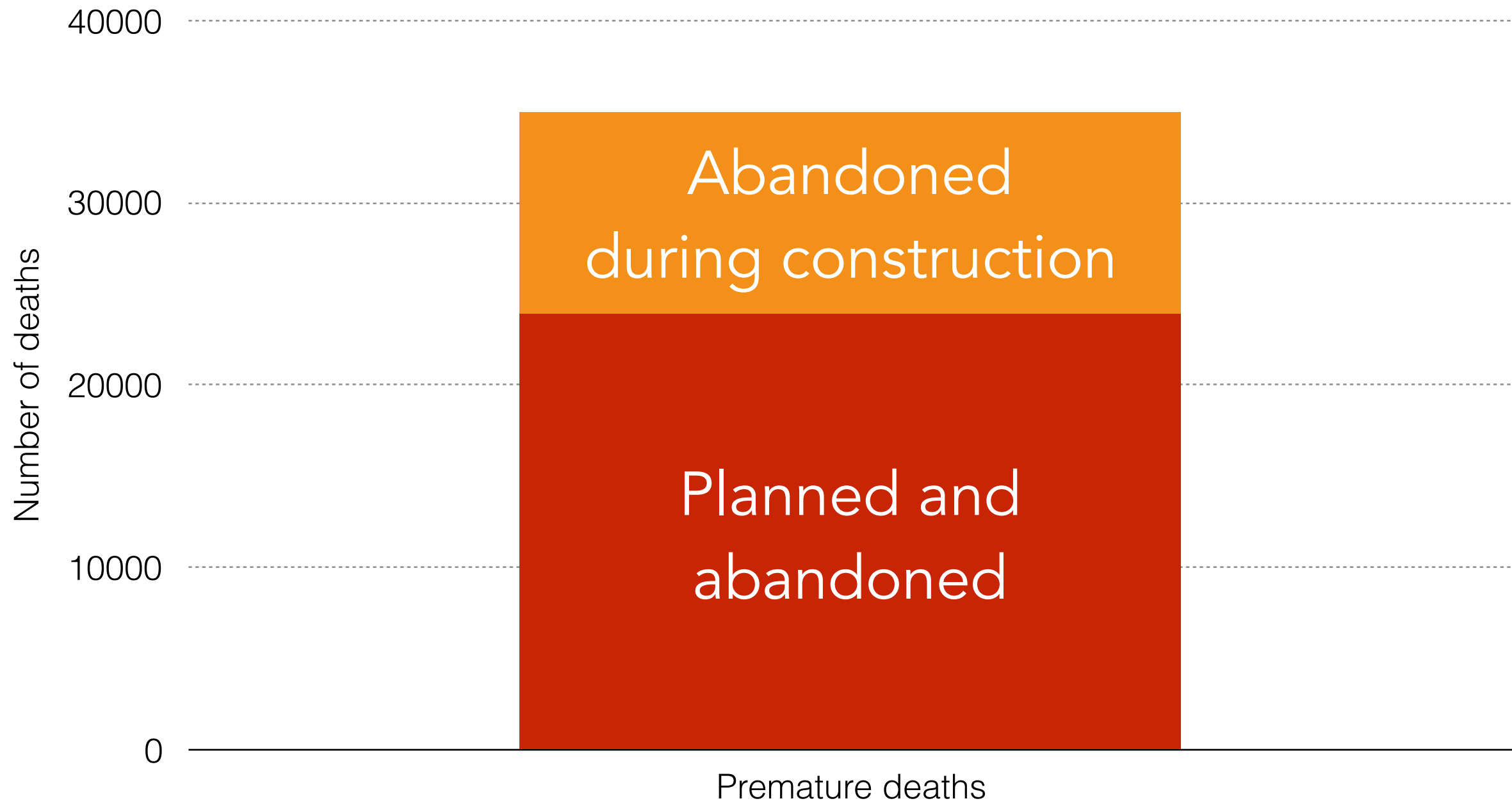
*Includes distributed solar

Source: US Energy Information Administration

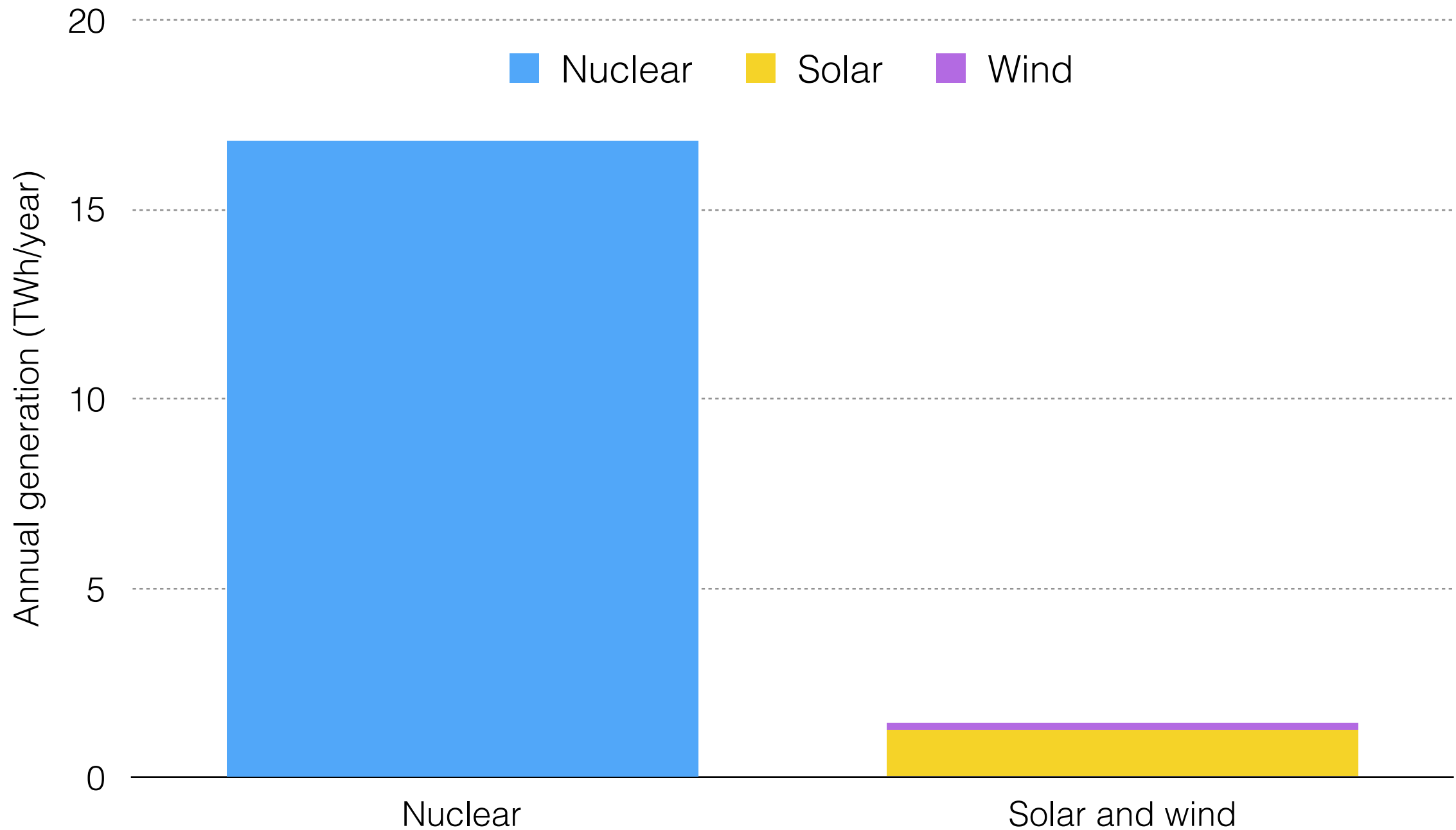
Since 1985, Ohio's nuclear abandonments increased emissions equivalent of adding 14 million cars to road.



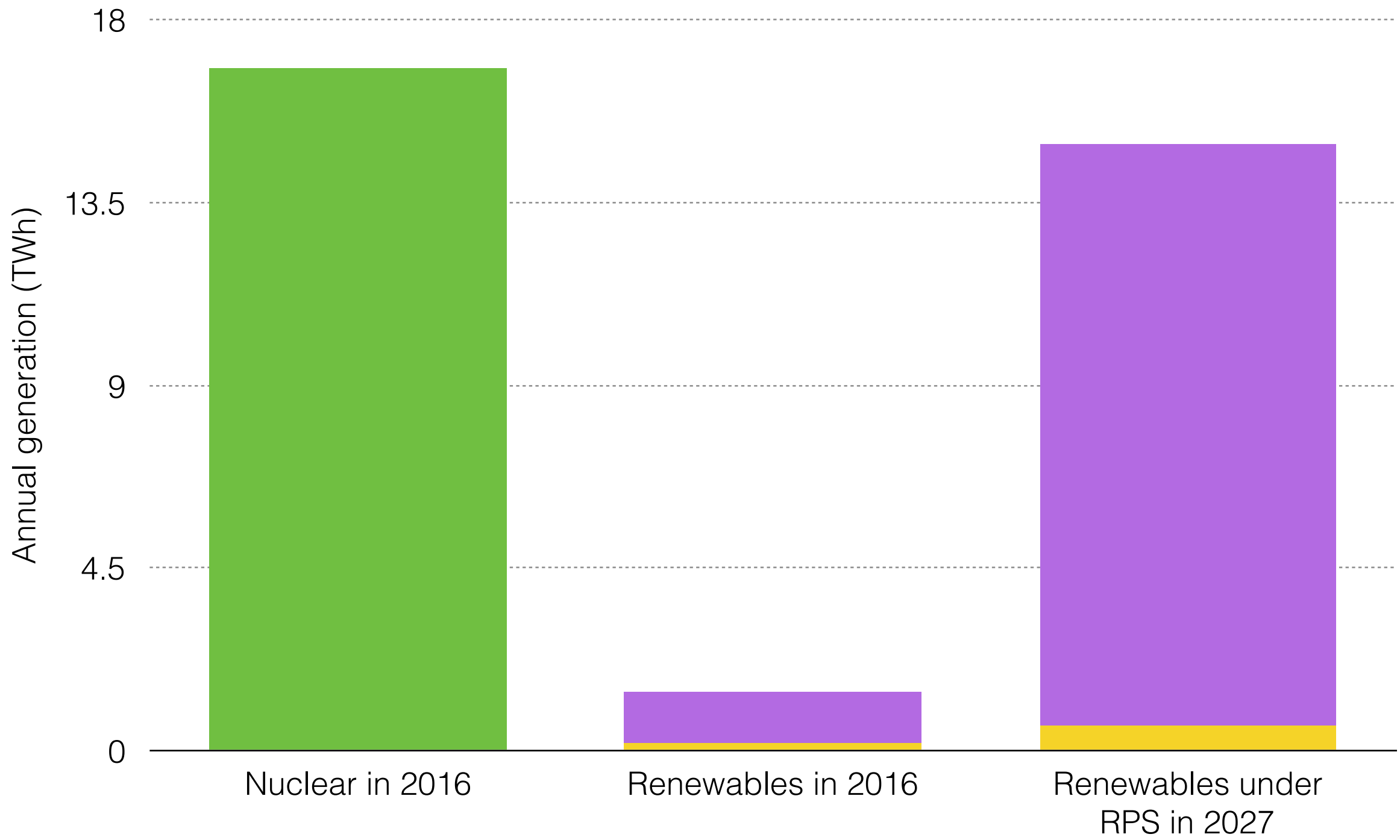
Nearly 35,000 premature deaths resulted from Ohio's nuclear abandonments and the pollution from the coal that burned instead.



Ohio nuclear provided almost 12x more electricity than Ohio solar and wind combined in 2016.



Nuclear produced more electricity in 2016 than renewables under RPS in 2027 assuming flat demand.



Source: <https://www.eia.gov/electricity/data/browser/>
<https://www.puco.ohio.gov/industry-information/industry-topics/ohioe28099s-renewable-and-advanced-energy-portfolio-standard/>

Ohio will face a net loss of at least 1,345 direct jobs if nuclear plants are replaced with new natural gas.

