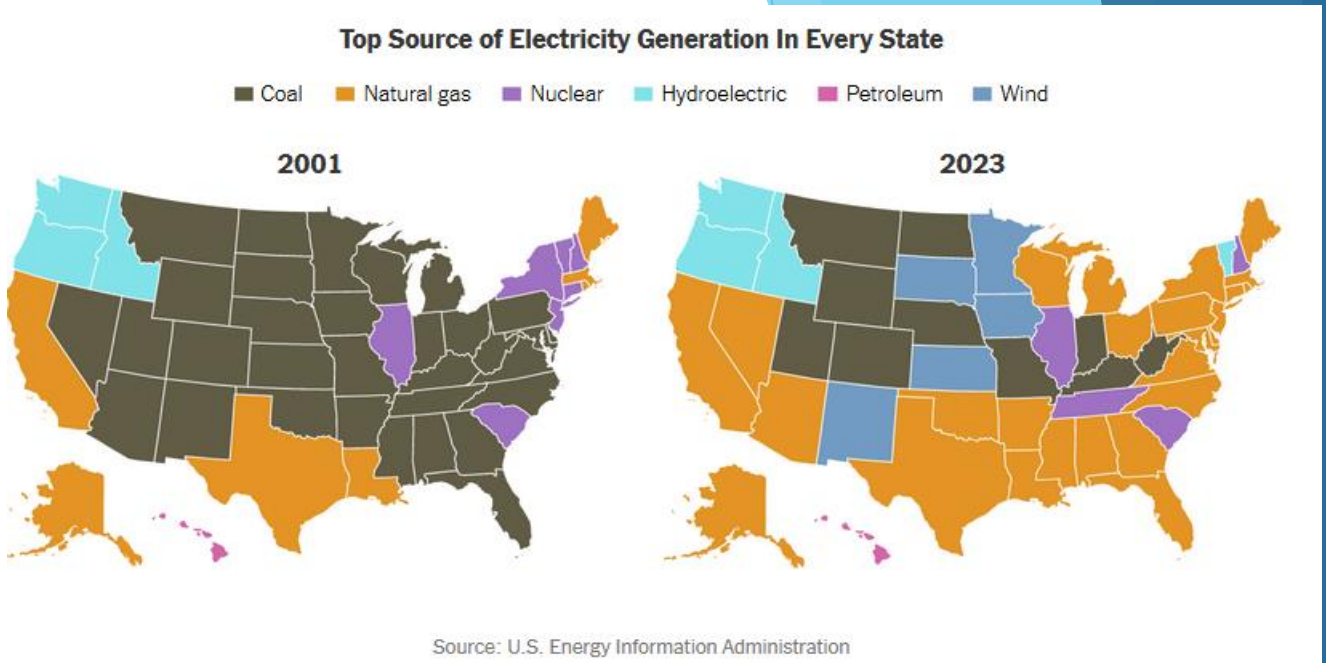
Episode 56WRE August 9, 2024. How Your State Makes Electricity. South Dakota to Wyoming.

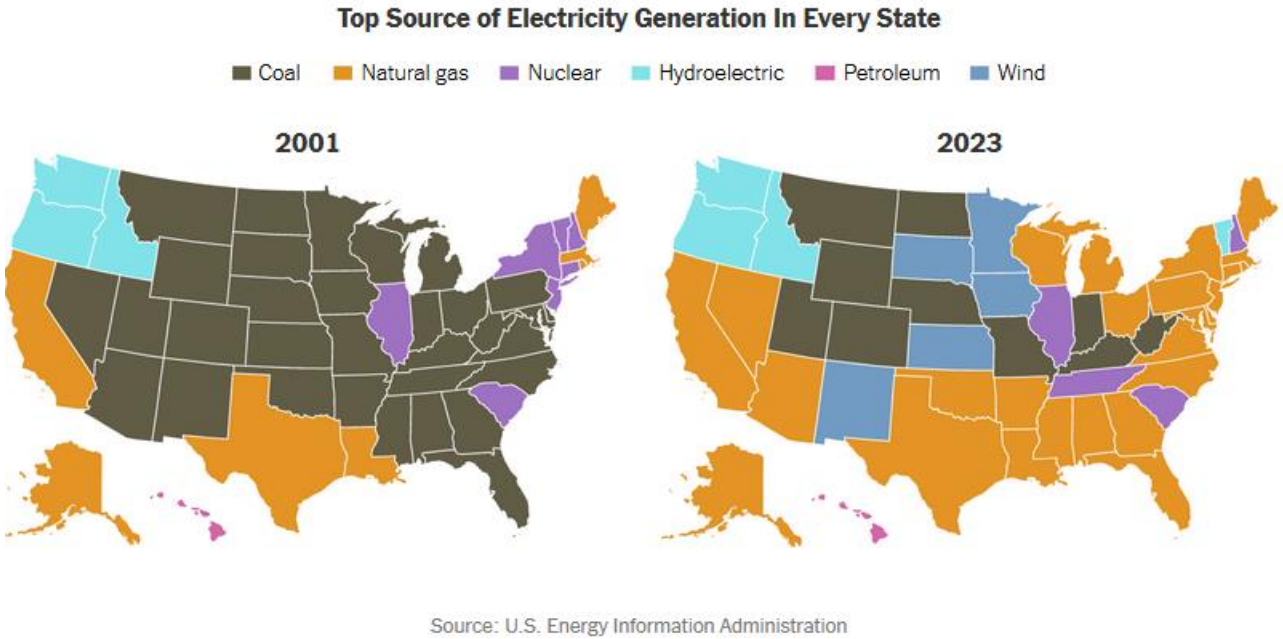
Episode 56WRE1 to 10 South Dakota to Wyoming. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. RAWSEP View: the United States Government should instead of certifying wood stoves as safe when they are not safe go forward with regulations that ban wood stove use and direct government money for use of dead wood only for home building and furniture building, for just a few examples of use of forest products for non-burning uses. RAWSEP View on the Article Below: How can we make United states decisions on energy sources for electricity and have those decisions on energy sources for electricity not be a stumbling block blocking a clean energy future? Perhaps the solution of using clean energy sources is already being implemented because Wind and Solar are more cost effective, and less



logistically difficult to implement than say what is now allowed to be called renewable biomass woodburning for electricity generation. But we cannot sit back and see what arbitrary decisions states make to block clean energy implementation. We have to analyze why bad decisions were made and find the reasons behind some states making good decisions. One excerpt from the article below.

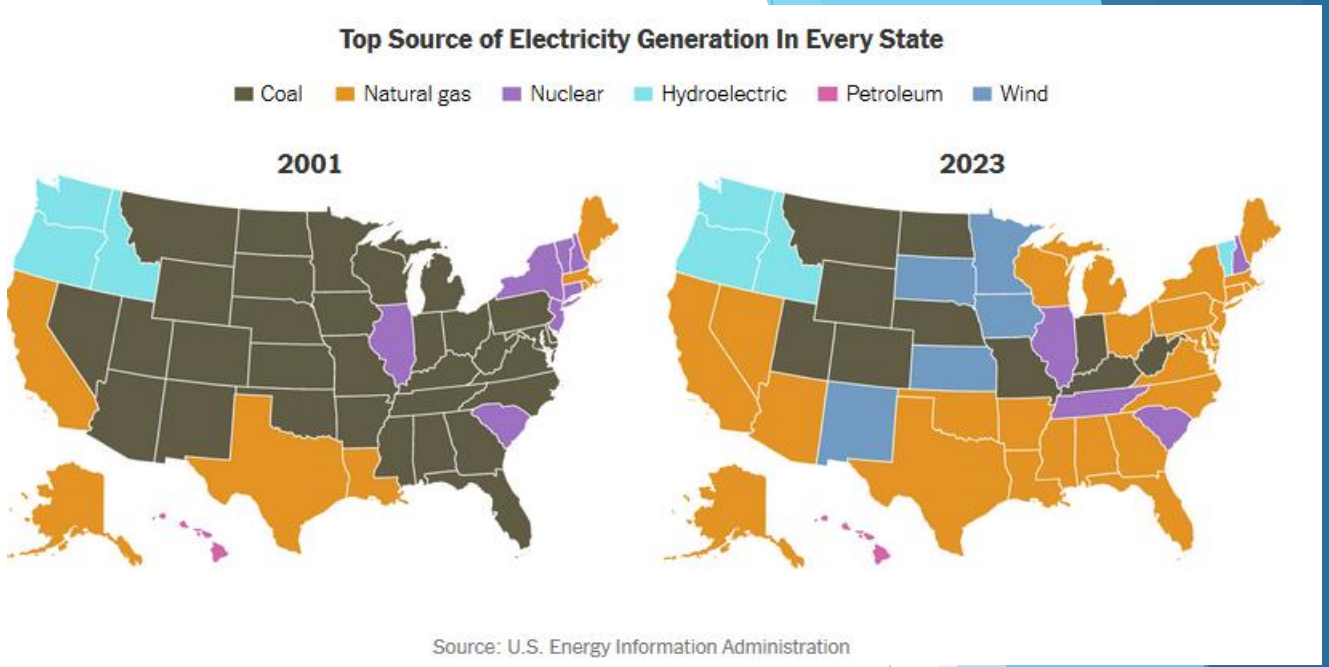
Money for Solar and Wind Clean Energy Generation.

President Biden's signature climate and energy law, the 2022 Inflation Reduction Act, aimed to turbocharge the growth of renewable wind and solar energy nationwide and to support other technologies that could reduce emissions from the power sector, like nuclear energy, advanced batteries and carbon capture and storage for gas plants. But the future of that law remains uncertain in an election year, with Republicans promising to repeal many of its clean-energy provisions. What happens at the federal level is only part of the equation. States have the power to accelerate, slow down or block new energy



development, too. From the article below. New York Times. How Does Your State Make Electricity? August 2, 2024 Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. RAWSEP View: The New York Times compiled a similar analysis of how each state generates electricity in 2018 and 2020 also. This 2024 analysis from the New York Times article is based on Government figures. The idea that energy flows between United States is explained below as cross state imports and exports. Data notes and methodology. Data comes from the U.S.

Episode 56WRE1 to 10 South Dakota to Wyoming. Excerpts edited by RAWSEP for brevity and clarity and relationship to Residents Against Wood Smoke Emission Particulates, a 501c3 nonprofit organization. We charted how electricity generation has changed in every state so far, from 2001 to 2023, using data from the United States Energy Information Administration. Find your state below:

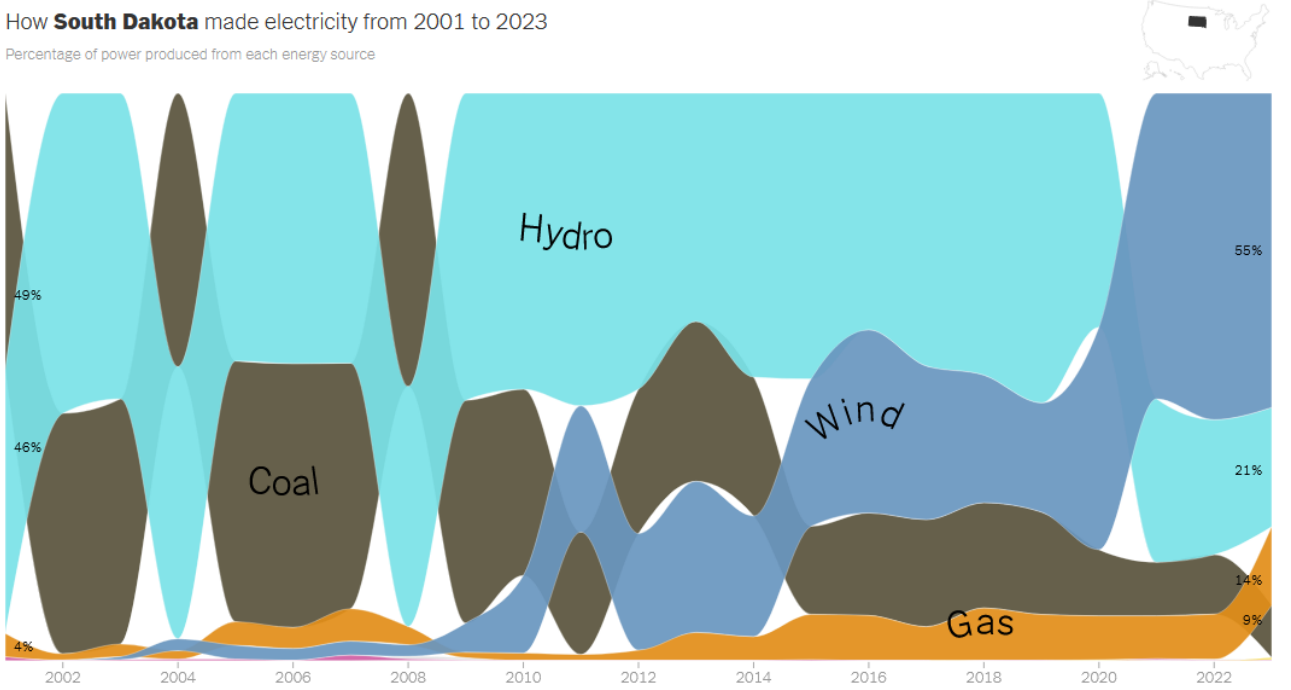


Ep56WRE1 of 10 How South Dakota made electricity from 2001 to 2023

Percentage of power produced from each energy source 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

CoalGasHydroWind 49%4%46%9%14%21%55%

RAWSEP View: In South Dakota Wind Power is the top electricity source since 2021. If wood burning is considered carbon free in South Dakota because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if South Dakota replaced coal burning with wood burning based on that scientifically debunked theory then on paper South Dakota might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. South Dakota is an energy exporter.



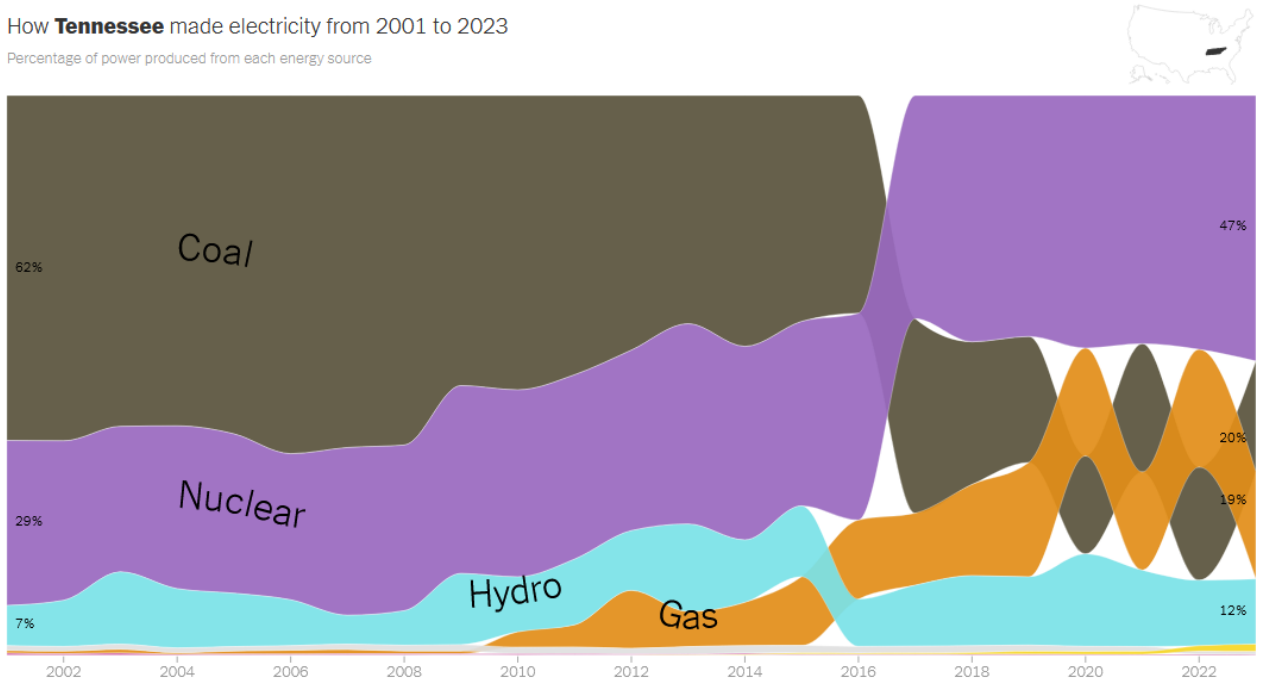
Ep56WRE2 of 10 How Tennessee made electricity from 2001 to 2023

Percentage of power produced from each energy source

2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

CoalGasNuclearHydro 62%29%7%20%19%47%12%

RAWSEP View: In Tennessee in 2017, coal-powered generation dipped below nuclear for the first time in nearly two decades. More recently, growing natural gas generation has vied with coal as the state's second-largest power producer. In 2016, a new nuclear reactor [was finally completed in Tennessee] after decades of delays. If wood burning is considered carbon free in Tennessee because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Tennessee replaced coal burning with wood burning based on that scientifically debunked theory then on paper Tennessee might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Tennessee is an energy importer.



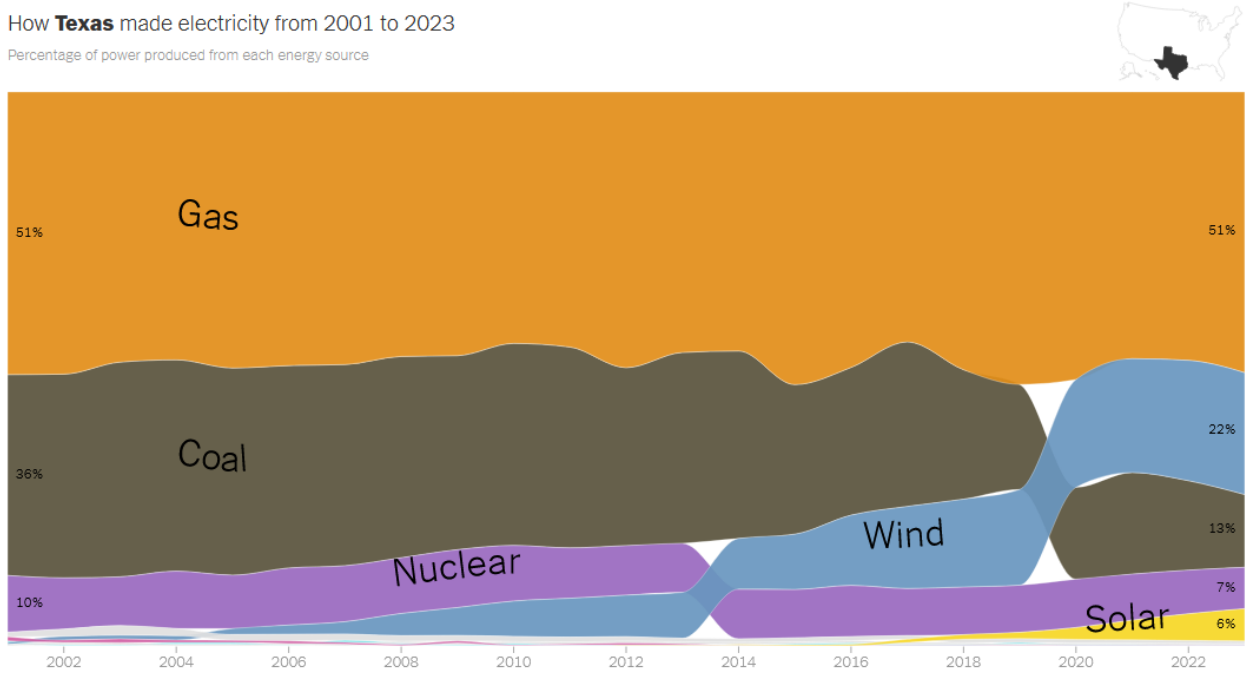
Ep56WRE3 of 10 How Texas made electricity from 2001 to 2023

Percentage of power produced from each energy source

2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

CoalGasNuclearWindSolar 36%51%10%13%51%7%22%6%

RAWSEP View: In Texas Natural Gas is the top electricity source. In absolute terms, Texas continues to burn more natural gas and more coal than any other state. In 2020, wind surpassed coal to become the second-largest source of electricity generation in Texas. Texas is, by far, the country's largest producer of wind power today, with Iowa and Oklahoma in a distant second and third place. In recent years, solar power has also surged in the state. Utilities and businesses in the state have largely turned to wind and solar power because they're so cheap to build, and not because of state mandates. If wood burning is considered carbon free in Texas because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Texas replaced coal burning with wood burning based on that scientifically debunked theory then on paper Texas might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Unlike most other states, Texas operates its own power grid, which is only minimally connected to the country's other regional grids. That means Texas is largely dependent on its own resources to meet its electricity needs.



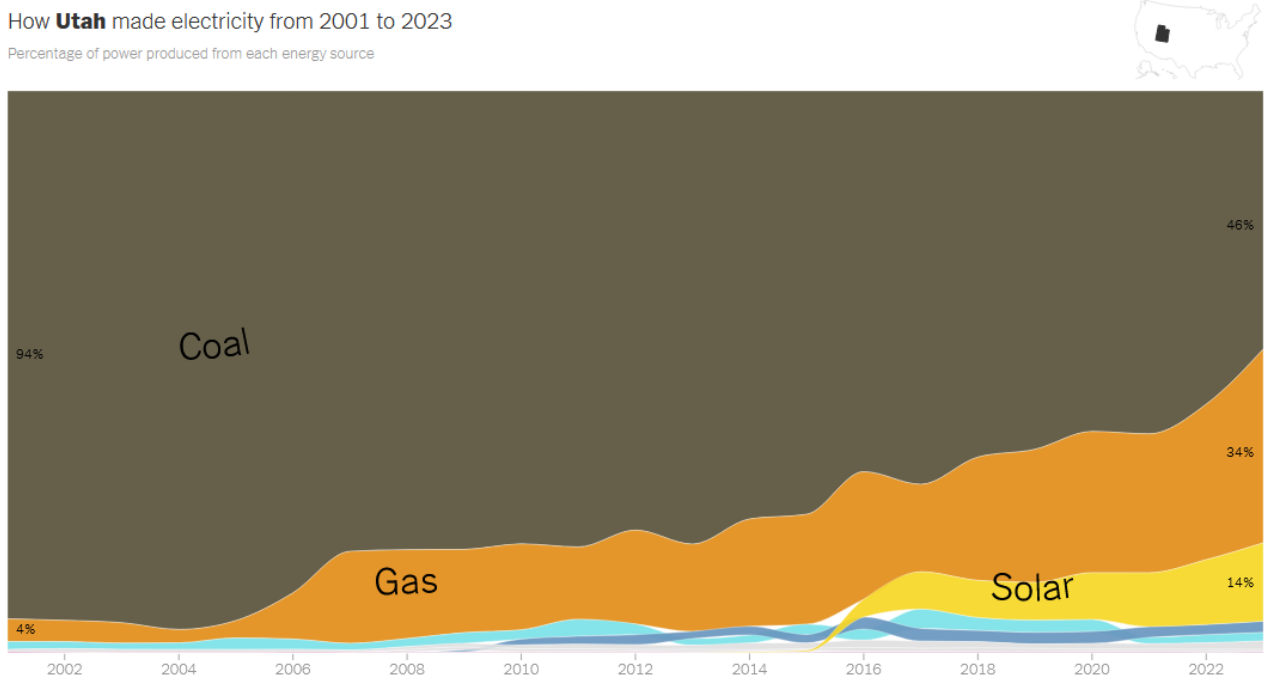
Ep56WRE4 of 10 How Utah made electricity from 2001 to 2023

Percentage of power produced from each energy source

2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

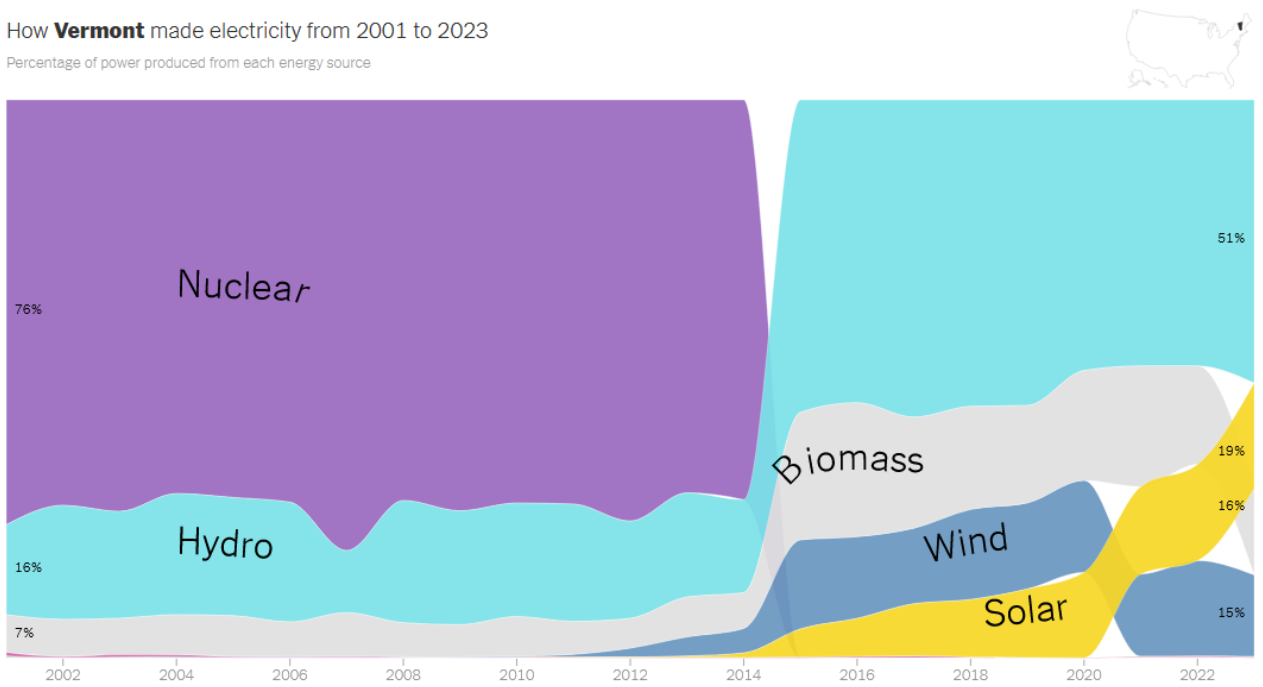
CoalGasSolar 94%4%46%34%14%

RAWSEP View: In Utah Coal is the top electricity source. Solar is the largest renewable source of power in the state, providing 14 percent of Utah's electricity generation last year. At least one Utah power plant is switching from burning coal to natural gas to comply with California's stricter environmental regulations. But Utah lawmakers are looking at ways to keep the coal power plant running alongside the new gas facility. If wood burning is considered carbon free in Utah because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Utah replaced coal burning with wood burning based on that scientifically debunked theory then on paper Utah might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Utah is an energy exporter.



Ep56WRE5 of 10 How Vermont made electricity from 2001 to 2023
Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
NuclearHydroWindBiomassSolar 76%16%7%51%15%16%19%

RAWSEP View: In Vermont renewables are the top electricity source since 2022. Most of the electricity generated in Vermont came from nuclear power until 2014, when the state's only nuclear plant, Vermont Yankee, closed down. Since then, virtually all of the electricity produced in the state has come from renewable sources, including hydropower, biomass wood burning, wind and solar. But Vermont now generates much less electricity, in total, than it did before the nuclear plant shut down and has to import a substantial amount of power from other New England states and Canada to satisfy demand. If wood burning is considered carbon free in Vermont because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Vermont replaced coal burning with wood burning based on that scientifically debunked theory then on paper Vermont might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning.



Ep56WRE6 of 10 How Virginia made electricity from 2001 to 2023

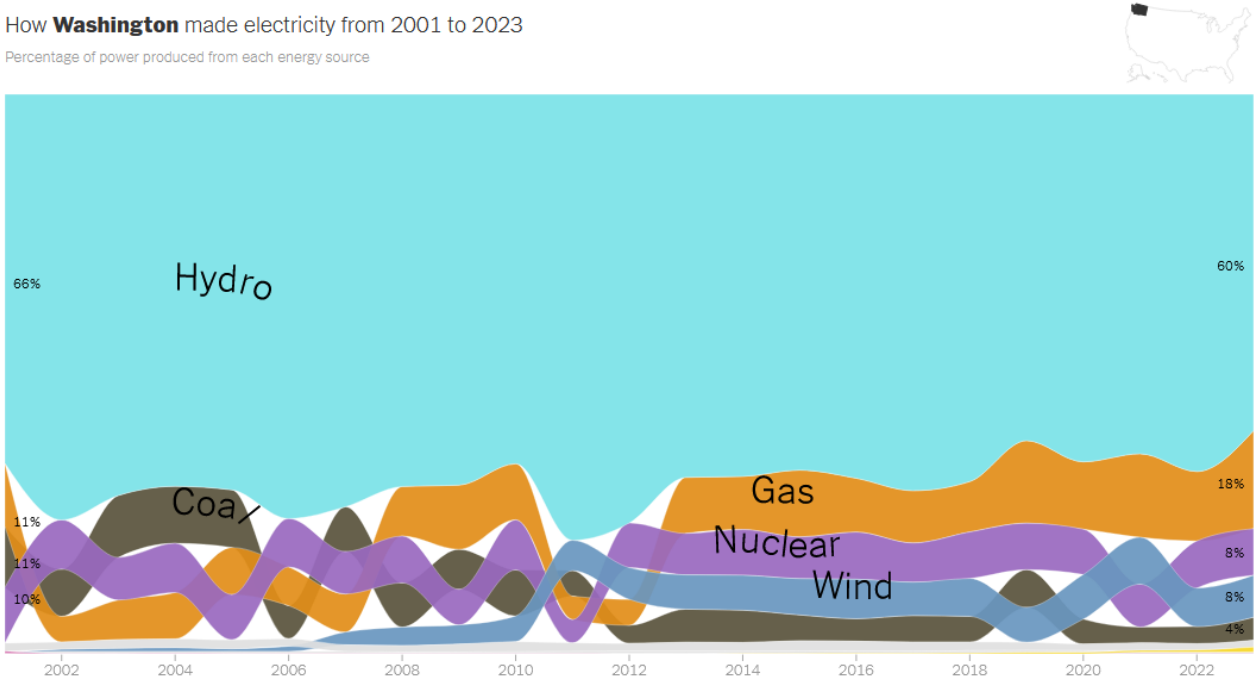
Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
CoalGasNuclearBiomass 49%5%34%7%55%32%6%

RAWSEP View: In Virginia Natural Gas is the top electricity source since 2015 as a result of the nationwide boom in hydraulic fracturing, or fracking, which unleashed a wave of cheap, plentiful gas. Nuclear generation has provided a little more than one-third of Virginia's electricity, on average, over the past two decades. If wood burning is considered carbon free in Virginia because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Virginia replaced coal burning with wood burning based on that scientifically debunked theory then on paper Virginia might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. The total amount of power produced in Virginia has been growing, but the state is also facing rising demand from power-hungry data centers. Dominion Energy, the state's largest electric utility, has proposed meeting that demand with a mix of new renewable power and gas generation in a plan that could increase the company's overall emissions. Virginia is an energy importer. In 2020, Virginia's Democratic-led Legislature passed a clean energy law that established new energy efficiency standards, set a schedule for closing old fossil fuel power plants and required that the state's two biggest utilities get all of their electricity from carbon-free sources by 2050. But a new, Republican administration has pushed to revise that law and shift the state's focus toward an "all of the above" energy strategy that includes greater support for natural gas power.

Ep56WRE7 of 10 How Washington made electricity from 2001 to 2023

Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
CoalGasNuclearHydroWind 11%11%10%66%4%18%8%60%8%
Washington is the nation’s largest producer of hydroelectric power, which has dominated the state’s

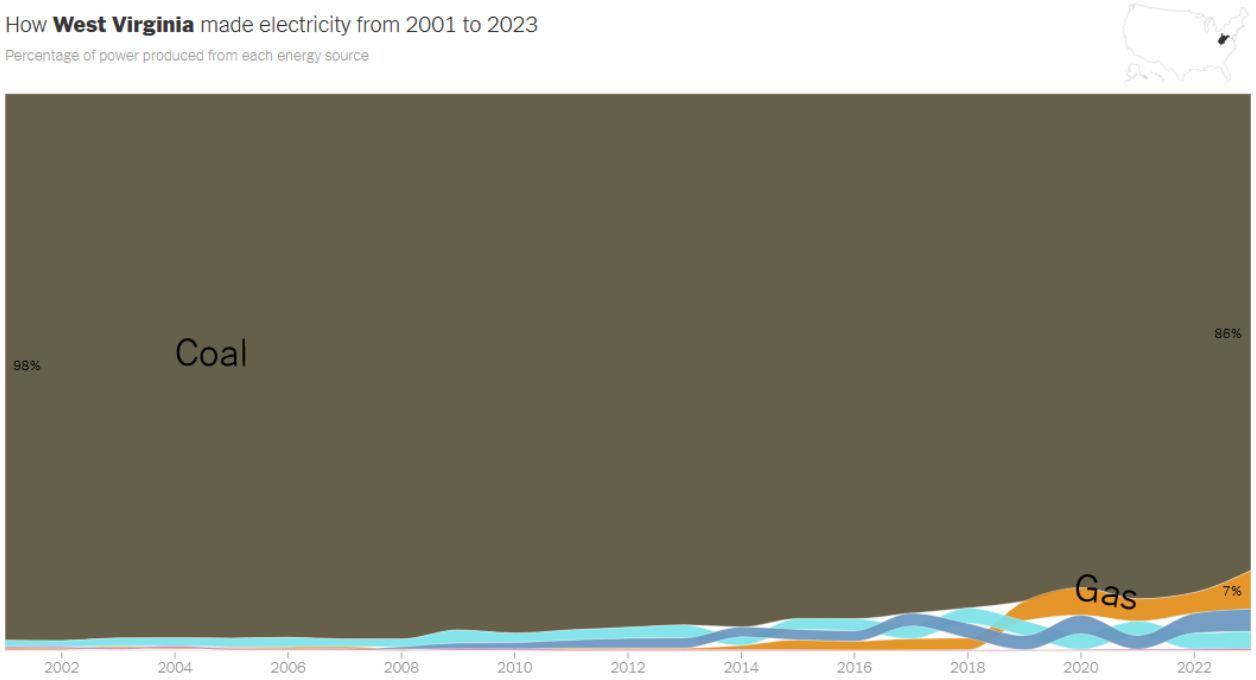
RAWSEP View: In Washington Hydroelectric Power is the top electricity source. The amount of power produced by hydro fluctuates from year to year with changes in precipitation, and other sources including natural gas, nuclear, wind and coal make up almost all of the rest. If wood burning is considered carbon free in Washington because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Washington replaced coal burning with wood burning based on that scientifically debunked theory then on paper Washington might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Washington is an energy exporter.



Ep56WRE8 of 10 How West Virginia made electricity from 2001 to 2023

Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
CoalGas 98%86%7%

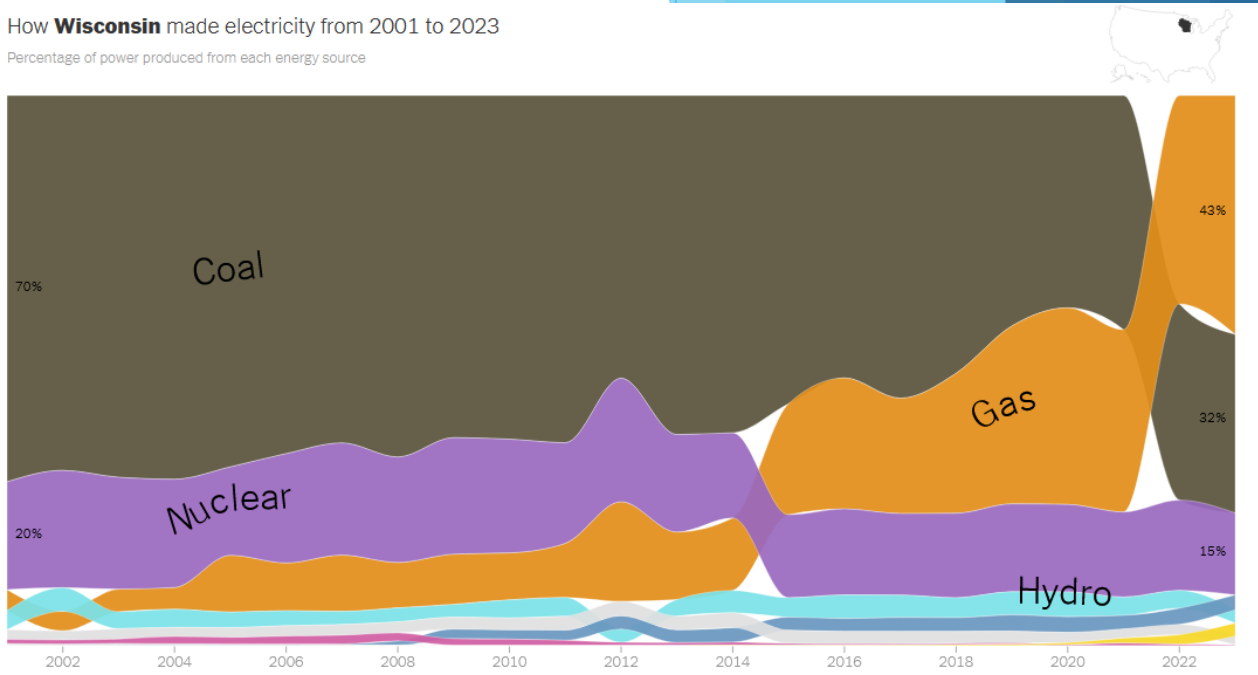
RAWSEP View: In West Virginia Coal remains the top electricity source. Coal has supplied more than 85 percent of the electricity produced in the state every year for more than two decades. While natural gas and wind have increased their generation share over the past decade, they still account for a relatively small portion of the electricity produced in the state. If wood burning is considered carbon free in West Virginia because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if West Virginia replaced coal burning with wood burning based on that scientifically debunked theory then on paper West Virginia might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. West Virginia is an energy exporter. In 2015, West Virginia became the first state to repeal its renewable energy standard after years of lobbying by conservative groups. The law required utilities to get 25 percent of their electricity from alternative and renewable energy sources by 2025. Opponents of the standard said it was hurting coal jobs and raising electricity rates.



Ep56WRE9 of 10 How Wisconsin made electricity from 2001 to 2023

Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
CoalGasNuclearHydro 70%20%32%43%15%

RAWSEP View: In Wisconsin Natural Gas is the top electricity source since 2022. Wind and solar power remain relatively small players in Wisconsin's electricity mix. If wood burning is considered carbon free in Wisconsin because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Wisconsin replaced coal burning with wood burning based on that scientifically debunked theory then on paper Wisconsin might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Wisconsin is an energy importer. In 2019, Governor Tony Evers, a Democrat, set a goal for the state to shift to 100 percent carbon-free electricity by 2050 and created a new state office to lead the transition. But the proposal has faced opposition from the Republican-led Legislature.



Ep56WRE10 of 10 How Wyoming made electricity from 2001 to 2023

Percentage of power produced from each energy source
2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022
CoalGasWind 96%71%5%21%

RAWSEP View: In Wyoming Coal is the top electricity source. In 2023 wind supplied more than a fifth of the electricity produced in Wyoming. If wood burning is considered carbon free in Wyoming because of the scientifically debunked theory of Carbon Neutrality of Wood Burning and if Wyoming replaced coal burning with wood burning based on that scientifically debunked theory then on paper Wyoming might seem to be meeting carbon free goals while in reality producing more air pollution than with coal burning. Wyoming is an energy exporter. Several major transmission line projects are currently in development to move more of Wyoming's abundant wind power to other Western states.