

## Energy and the Environment

Texas is an energy state. We have ample resources in both oil and gas and in opportunities for renewable electrical generation. While natural gas continues to be the number one way Texas generates electricity, renewables like wind and solar continue to grow. Texas is now the number one wind energy-producing state and new battery storage capability makes renewables an even more reliable part of our energy portfolio. That's good news. Fossil fuel generation causes multiple environmental problems.

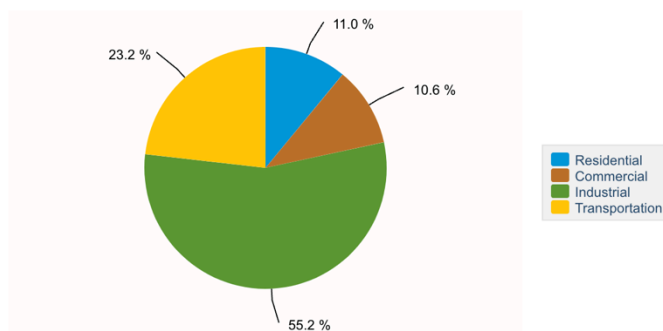


In the short term, burning fossil fuels like natural gas (methane) and coal creates poor air pollution, which is dangerous to vulnerable groups like the very young, the very old, and those with respiratory illnesses. In the long term, the production and burning of fossil fuels releases greenhouse gasses into the atmosphere, which causes climate change. With its diverse geography, Texas is vulnerable to pretty much every kind of climate impact you can think of. We have droughts, floods, severe thunderstorms, tornadoes, blizzards, extreme temperature (hot and cold), and more. Anything we can do to stop or slow climate change is something we do for the safety and security of future Texans.

### Energy Consumption

Texas Energy Consumption by End-Use Sector, 2021

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eia Source: Energy Information Administration, State Energy Data System

The industrial sector is the biggest consumer of electricity in the state, consuming more energy than the transportation, residential, and commercial sectors combined.

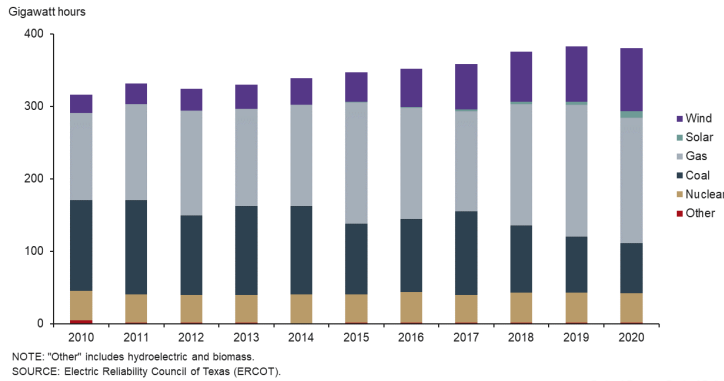
### Energy Production

Natural gas still accounts for the largest share of Texas's energy generation in Texas, but renewables like wind and solar have grown and now contribute a significant amount of Texas's electrical generation. The most rapid growth in renewables has been solar. Solar panels use photovoltaic cells to transform the

sun's energy into electricity. In the past, solar panels could only supply electricity to the grid during the daytime, but new battery storage, installed in conjunction with solar panels, has made solar energy available continuously.

In fact, battery storage was essential in keeping the electricity on during periods of high demand on the grid during the recent extreme cold temperatures. Wind and solar have been an integral part of avoiding rolling blackouts during many of our extreme temperatures this year. This summer, during our month-long streak of temperatures over one-hundred degrees, solar contributed as much as 20% of the state’s electricity needs.

Renewables' Share of Annual Power Generation in Texas Grew Steadily in Past Decade



One of the reasons regulators have cited for favoring fossil fuel fired generation during the last legislative session is that these traditional power plants are able to supply electricity quickly in the event of higher demand. The term used to describe a resource’s ability to come online quickly is “dispatchability.” It is understandable that regulators want to stabilize our electrical grid to avoid another disaster like Winter Storm Uri in 2021. But now that battery storage is available, it is time for regulators,

and our legislature, to think more broadly about what constitutes dispatchable energy.

The rise of renewables in Texas is a good thing for Texans. Renewable energy is cheaper, since there is no fuel source to replenish, and it doesn’t emit carbon dioxide or methane, both of which contribute to climate change. It also doesn’t emit oxides of nitrogen or volatile organic compounds, the chemicals that contribute to air pollution and negative health impacts.

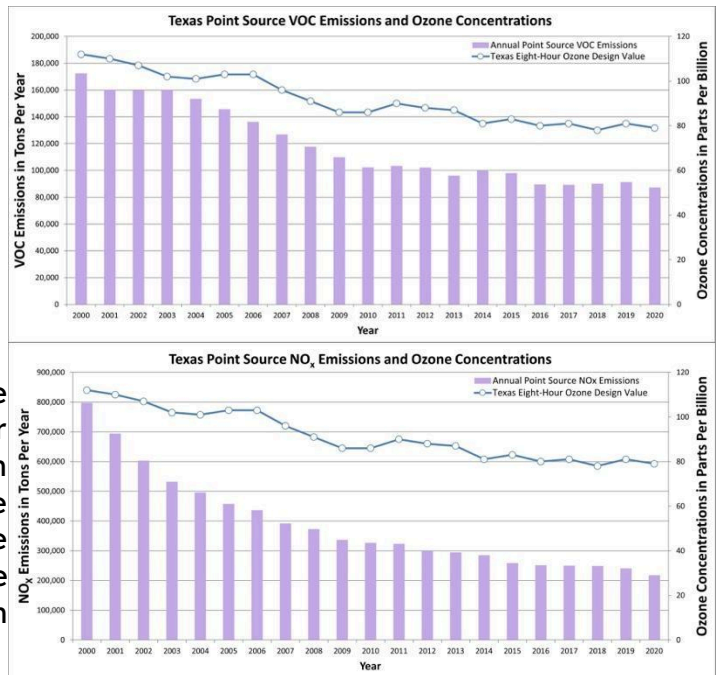
### Environmental Issues

When it comes to energy, the biggest environmental concerns are air quality and climate change. All stages of fossil-fueled electrical generation emit climate-warming pollution, from drilling to combustion. Methane, the main constituent in natural gas, was recently found to be just as harmful to the climate as coal, once leaks during drilling, storage, and transport are accounted for. Methane has a shorter residence time in the atmosphere, but it is much better at trapping heat than carbon dioxide. Getting methane leaks from the oil and gas industry under control, and stopping routine flaring, where waste methane is burned, is a priority for climate advocates because of its potential to make a difference for climate in a short amount of time. The federal Environmental Protection Agency recently passed new rules which cut down on routine flaring and make other provisions for stopping methane leaks. We support these new rules and urge Texas environmental regulators to follow them.

Chemical constituents released when methane leaks or is burned cause air pollution, including smog as well as toxic pollution which is harmful to human health. Burning fossil fuels also leads to the formation of tropospheric ozone, which is a respiratory irritant and can damage agricultural plants, leading to lower crop yields. Texas has cleaned up its NO<sub>x</sub> and VOC emissions over the past thirty years, but there is still a lot of room for improvement (see graphs below). Extraction of fossil fuels create environmental problems too. Offshore drilling for petroleum is vulnerable to oil spills, fracking for natural gas causes water quality problems and even earthquake clusters, mining for coal is dangerous to workers and pollutes air and groundwater.

## Transportation

Texans rely on personal vehicles for nearly all of their transportation needs. That means millions of individual “mobile sources” for emissions of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>2</sub> and other air pollutants. For Texas to make lasting progress in improving air pollution and its contribution to climate change, it is essential to consider mass transit as a policy goal. Public transportation has economic and social benefits that go beyond its environmental benefits. A robust system would improve congestion on highways, improve mobility for those not able to drive, and provide an affordable option for those not able to purchase and maintain a personal vehicle. Many cities are considering highway upgrades and it is the perfect time to incorporate public transportation into those plans.



## Grid Concerns and Energy Policy

After the devastating failure of the electrical grid during Winter Storm Uri in 2021, grid reliability is a continuing concern of energy regulators and the legislature. Much of the conversation during the 88<sup>th</sup> Legislative Session centered on dispatchable energy, which unfortunately meant more resources for fossil generation rather than at the expense of renewables. Technological advancements in battery storage make renewables a dependable part of the state’s generation portfolio while improving air quality and reducing CO<sub>2</sub> emissions, which helps mitigate climate change. Improving the ability of the electrical system to generate and transmit energy to where it’s needed is an important concern, but experts warn that the lack of attention to energy efficiency and demand response will make any supply-based solution ultimately ineffective.

Energy efficiency refers to programs which lead to better-insulated buildings and more efficient HVAC systems. Of particular concern is “resistance heating,” household heaters that operate the same way as a toaster or a hair dryer. Replacing these systems with appropriately scaled heat pumps would use less energy, meaning less strain on the grid and less cost for the customer. Demand response refers to customers using less energy when conditions on the grid are tight. An example of demand response is utilities incentivizing customers to turn their thermostats up in the summer or down in the winter. Instead of those frustrating energy conservation calls on extreme weather days, customers could be rewarded for conserving energy instead. New technology could make this seamless for those who are interested. Using the energy we have more wisely is a sensible and cost effective way to improve the reliability of the grid.



Selected Legislative Actions from the 88<sup>th</sup> Session  
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*State Parks Land Acquisition:* SB 1648 and SJR 74 (Parker) establishes the Centennial Parks Conservation Fund. Thanks in part to the work of Rep. Armando Walle, the Legislature is investing \$1 billion in the fund to help create new state parks. It's a historic investment that will allow the Texas Parks and Wildlife Department to create dozens of new parks in the coming decades, huge wins for wildlife and for all of us who love the great outdoors. SB 1648 was signed by the Governor. SJR 74 was approved by Texas voters this November.

*Anti-renewable energy bills:* While more than a dozen anti-renewable energy bills were filed this session, only a few ended up making it through the process. HB 1500 (Holland), the "PUC Sunset" bill, was amended to:

- add transmission costs to certain renewable projects to require renewables to subsidize the construction of new fossil fuel plants starting in 2027
- study making renewables pay higher "ancillary services" fees
- end the state's renewable energy requirement (not very consequential since Texas hit that requirement long ago).

Some of the measures that would have been most harmful to renewables, including a proposed discriminatory permitting program, thankfully died. Signed by the Governor.

*Energy efficiency:* SB 2453 (Menendez) allows the State Energy Conservation Office to adopt new statewide codes to make new buildings more energy efficient. Vetoed by the Governor. Unfortunately, other important efficiency bills died, including SB 258 (Eckhardt), SB 114 (Menendez), and HB 4811 (Anchia) all died.

*Offshore wind:* HB 4734 (Lopez) would study the supply chain for the burgeoning offshore wind industry in Texas. The bill passed the House, but died in the Senate.

*TCEQ Sunset:* SB 1397 (Schwertner) reauthorizes the Texas Commission on Environmental Quality and makes very modest improvements to the agency. For example, in very rare circumstances, the TCEQ could issue fines as high as \$40,000 per day (up from \$25,000 per day). Signed by the Governor.

*Pollution complaints:* SB 471 (Springer) gives the TCEQ discretion to not inspect facilities when complaints are filed. Signed by the Governor.

*Notifying legislators of pollution violations:* SB 813 (Miles) would require TCEQ to alert legislators of major enforcement actions taken against polluters in their districts. Vetoed by the Governor.

*Concrete batch plants:* SB 1399 would codify TCEQ's "Protectiveness Review, the analysis the agency uses to evaluate the protectiveness of air quality permits. It would prescribe an updated Protectiveness Review every six years. S.B. 1399 would also require a standard permit to be renewed every six years rather than the current 10 years." Vetoed by the Governor.

Subsidies for polluters

*Chapter 313 renewal* - HB 5 (Hunter) provides for abatements on school taxes for new manufacturing facilities. The bill allows polluting petrochemical and LNG plants to receive tax breaks, but excludes renewable energy and batteries from participation. Senate amendments made the program far less expansive, and more accountable, than its controversial predecessor, the "Chapter 313 program." Signed by the Governor.

*Subsidies for new gas power plants* - SB 2627 and SJR 93 (Schwertner) provide low-interest loans for the construction of new methane gas power plants, at a potential cost of \$10 billion. SB 2627 was signed by the Governor. SJR 93 was approved by Texas voters this November.

*Gas powered lawn equipment:* SB 1017 (Birdwell), targeting efforts by Dallas and other cities to limit use of polluting, gas powered leaf blowers and other lawn equipment, prohibits cities from adopting bans on the sale of engines based on its fuel source. Signed by Governor.

*Enforcement of oil and gas laws:* HB 33 (Landgraf) prohibits "Texas state agencies and officials from assisting any federal agency or official with the enforcement of any federal act that purports to regulate oil and gas operations." Signed by the Governor.

*Greenhouse gas pollution:* SB 784 (Birdwell) prohibits cities from regulating greenhouse gas emissions. Signed by the Governor.  
Electric vehicles

*EV Driver Fees:* SB 505 (Nichols) establishes a new \$200 annual fee for drivers of electric vehicles. Signed by the Governor. HB 3014 (Harris) waives emissions inspections for EVs. Signed by the Governor.

*EV Charging Stations:* SB 1732 (Hancock) requires Tesla Superchargers to have adapters for non-Tesla vehicles and other stations to have adapters for Teslas by 2030. Signed by the Governor.

SB 1001 (Schwertner). Requires EV charging stations to be regulated by the Department of Licensing and Regulation to make sure they function properly. Signed by the Governor.

*Project Connect:* HB 3899 (Troclair) will force the city of Austin to hold a new election to approve bonding authority to build the Project Connect light rail and transit plan. The bill died thanks to a parliamentary maneuver by Rep. John Bucy