

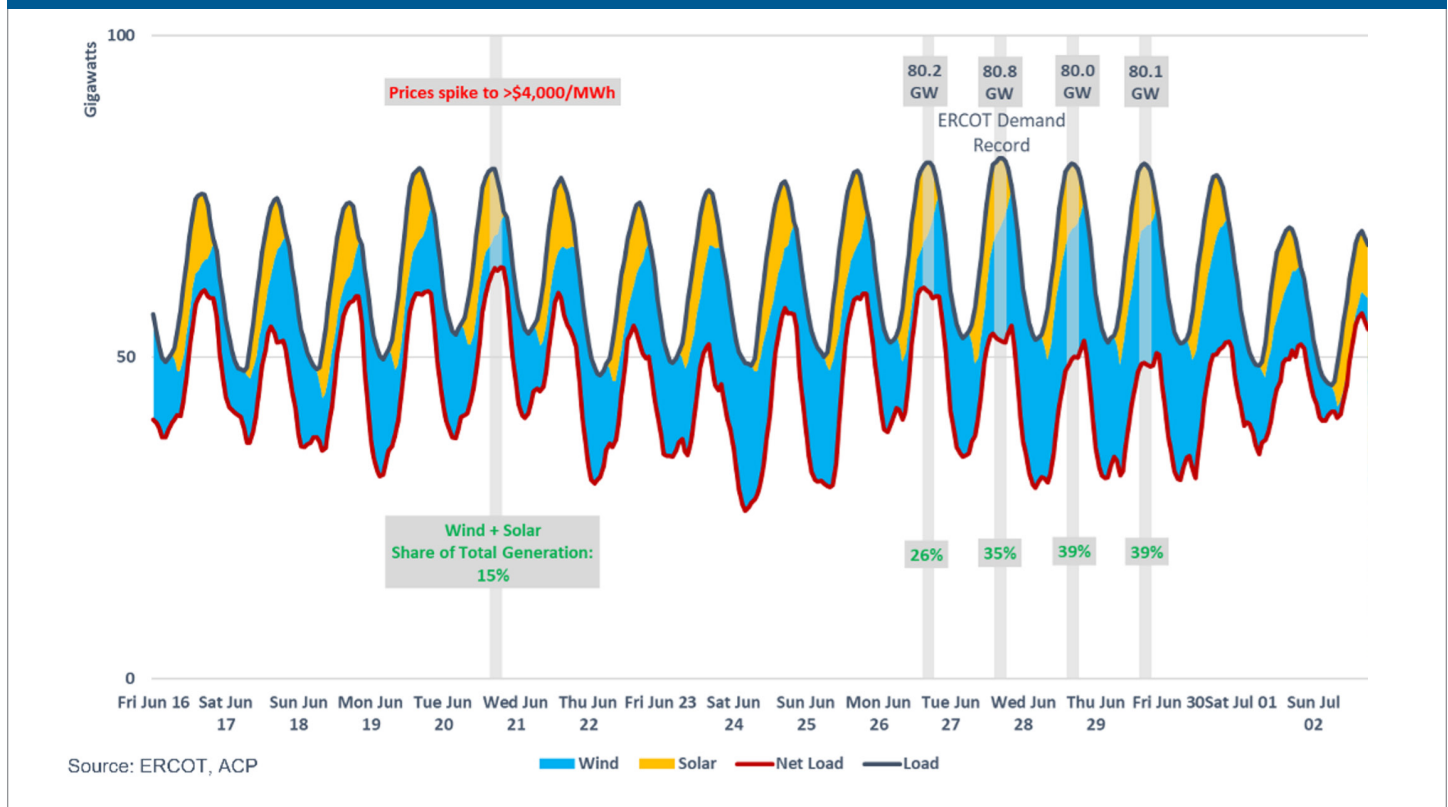
Clean Energy Keeps Texas Grid Resilient During Heatwave

During Texas' most recent heatwave, wind and solar energy resources powered – and cooled – Americans' homes while keeping energy costs low, delivering nearly **one-third** of ERCOT's power during peak demand hours in record heat.

During a historic heatwave in Texas, wind and solar resources delivered an average of **30% of the electric grid's needs** during the peak 10% of demand hours between June 19 – June 30, 2023.

Wind and Solar to the Rescue During Heatwave in Texas

ERCOT Generation June 16 – July 2, 2023



In peak hours, renewables often provided **35-40% of total electricity**. Clean energy's output kept electricity prices relatively low even with outages of gas and coal plants.

By providing affordable and reliable energy generation during periods of record demand, clean power sources likely **saved consumers over \$1 billion** in avoided electricity costs during the heat wave alone.¹

Resource diversity and predictability is critical to grid reliability and economic security. The Washington Post's Catherine Rampell wrote about how adding renewable resources has affected grid reliability in Texas: "Texas has rapidly increased solar capacity, enabling as much as 16,800 megawatts of solar power to be produced on the grid as of the end of May. That's roughly six times the capacity that existed in 2019 (about 2,600 megawatts), according to data from the Electric Reliability Council of Texas, the state's grid operator."

¹ Axios. Renewables help tame Texas electricity costs as heat wave swamps state. Available: <https://www.axios.com/2023/07/05/texas-heatdome-record-temperature-electricity>

By the Numbers

27%

of electricity generated in Texas is from wind and solar

\$83.2 billion of total clean power investment into Texas (through 2022)

Nearly **\$300 million** in taxes supporting local governments each year generated by clean power projects

Over **\$300 million** delivered to Texans each year via clean energy land lease payments

News Coverage

- [Solar, wind energy keeping Texas power grids running amid weeks-long heat wave](#) (ABC News, 7/7/23)
- [Renewables help tame Texas electricity costs as heat wave swamps state](#) (Axios, 7/5/23)
- [Solar & Wind Energy Saving Texans From Record Heat Wave \(Op-Ed\)](#) (The Week, 7/5/23)
- [Renewables are saving Texas. Again. So give them their due. \(Op-Ed\)](#) (The Washington Post, 7/4/23)
- [Solar power in Texas proves its worth amid heat wave](#) (San Antonio Express-News, 7/4/23)

“It's another demonstration of the benefit for consumers that we see from wind and solar.”
–Doug Lewin, Texas Energy and Power Newsletter

“Having solar provide during the hottest parts of the day is allowing our thermal [i.e. fossil fuel] fleet to not run itself into the ground as fast.”
– Josh Rhodes, University of Texas at Austin

“Wind and solar are giving us a big enough buffer that even when we have a handful of power plants go offline, it isn't causing disruptions.”
– Dan Cohan, Rice University in Houston



Photo credit: Nextera