



The Southern Alliance for Clean Energy

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Today, the Southern Alliance for Clean Energy (SACE) released the ["Tracking Decarbonization in the Southeast, Fifth Edition"](#) report highlighting the most recent data on electric power generation and emissions in the region.

[Please join the webinar on Wednesday, August 9 at 12:30 PM ET](#), to hear report authors Heather Pohnan, Energy Policy Manager, and Maggie Shober, Research Director, share highlights from the analysis, including:

- Carbon plans and Integrated Resource Plans (IRPs) of utilities in the region
- New federal and established state policies behind decarbonization progress
- How the ongoing power sector transition in the region has to accelerate to avoid the worst impacts of the climate crisis

Read the report: ["Tracking Decarbonization in the Southeast" Fifth Edition](#)

Register to attend the webinar: [Wednesday, August 9 at 12:30 PM ET](#)

Read an excerpt of the corresponding blog post below, or view the complete blog post [here](#).



[Tracking Decarbonization in the Southeast: 2023 Update](#)

by Heather Pohnan, Energy Policy Manager, and Maggie Shober, Research Director

Communities across the Southeast, particularly frontline communities, are already living the reality of the climate crisis. Over the past year, we have felt heat waves, hurricanes, and blackouts caused by extreme winter weather across our region. To avoid worsening impacts of the climate crisis, scientific guidance says we must limit warming to 1.5° C. The key to this is reducing greenhouse gas emissions. That means from here on out, every ton of greenhouse gas emitted, every resource decision to continue to rely on fossil fuels or switch to clean resources, and every policy to drive electrification, matters immensely.

We now have two major pieces of federal legislation designed to aid in decarbonization: the Bipartisan Infrastructure Law (BIL) and the Inflation Reduction Act (IRA). Together, these laws will accelerate renewables, energy efficiency, and electrification... but will it be enough?

To answer this question, SACE has compiled historical data from the past decade, and utility resource plans, called Integrated Resource Plans (IRPs), which project electricity demand and production methods into the future. The latest edition of ["Tracking Decarbonization in the Southeast"](#) finds that current utility resource plans are not in line with overarching carbon emission reduction targets; and that our region's utilities still have a lot of work to do before any of them are on track to decarbonize.

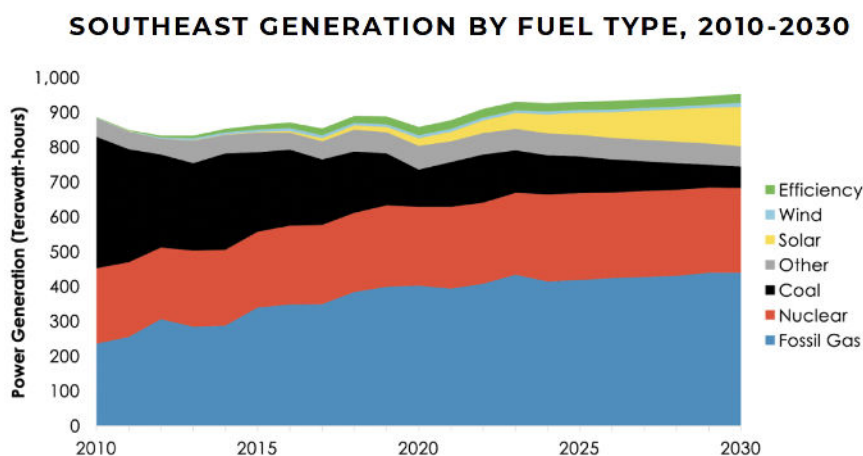
How Do We Track Decarbonization and Why Are We Doing It?

Decarbonization refers to the reduction of carbon dioxide emissions through transitioning to power sources that emit lower CO2 emissions. Many different sectors and users emit CO2; and many of

them can use a decarbonization strategy called electrification, which means switching from direct fossil fuel use to electricity to reduce CO₂ emissions. For example, electrification plays a key role in decarbonizing the transportation sector because electric vehicles are so efficient that there is the potential for significant emission reductions even taking into account the emissions associated with producing the electricity to charge them.

Utilities decarbonize by replacing fossil fuels with energy efficiency and energy from renewable sources. And especially as other sectors like transportation continue to electrify, decarbonizing the power supply is critical. **Overall emissions will become lower the more we decarbonize the electricity sector.** This is why our report focuses on decarbonization of the electric power sector in the Southeastern United States. (Note that generation and carbon dioxide CO₂ emissions figures in the report are tied to the utility or state where the power is consumed, and not where it is generated or emitted.)

One way of tracking decarbonization of the electricity sector is by looking at the mix of resources that our region's utilities are using to meet electricity needs. The projected resource mix across the region, based on current utility plans as of summer 2023, shows a decrease in coal, an increase in solar, and a continued reliance on fossil gas. **Fossil gas generation is projected to increase by 2030 as utilities such as Duke Energy, the Tennessee Valley Authority, and Dominion Energy South Carolina all plan to add new gas-fired generation to their fleets.**

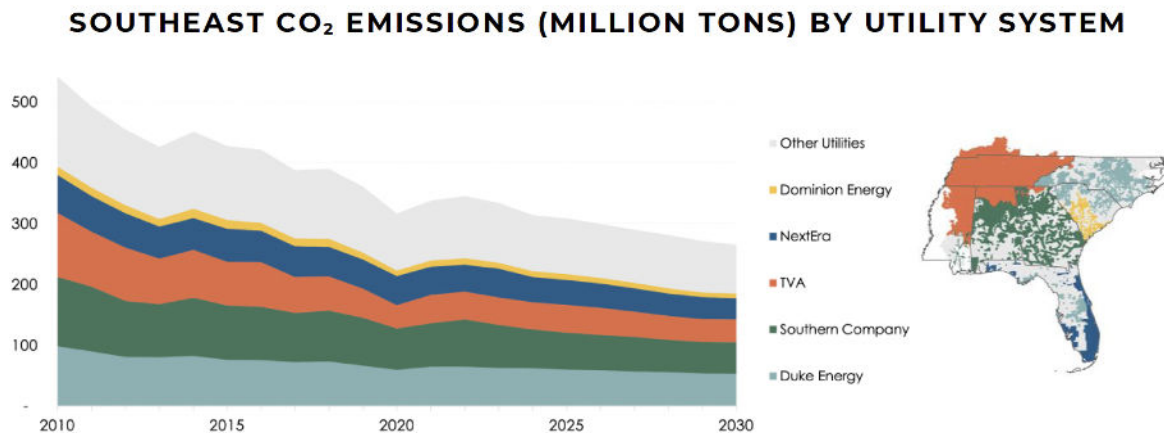


Source: [*"Tracking Decarbonization in the Southeast" Fifth Edition*](#), page 3.

These investments in new gas plants will hinder the emissions impact of declining coal generation, and that isn't even accounting for indirect greenhouse gas emissions. The process of producing and distributing fossil gas includes the potent greenhouse gas methane. Estimates of leakage rates are highly variable, ranging from approximately 1-5%. The inclusion of methane leaks into these figures would even further blunt the emission reduction projections presented in our report.

So how does this translate into total tons of CO₂? After a steep decrease in emissions in 2020 – largely due to lower electricity demand driven by the COVID-19 pandemic – emissions rebounded in 2021 but remained below the 2019 level. Annual emissions are projected to remain above 2020's level until 2024 as utilities continue to burn coal and gas to meet increased load. Emission

reductions from 2022 through 2030 are largely driven by the reduction in coal and increase in solar generation across the region, with energy efficiency also reducing emissions.



Source: ["Tracking Decarbonization in the Southeast" Fifth Edition](#), page 4.

To bring forecasts in line with the Biden Administration's target of reaching zero emissions by 2035, emissions need to be closer to 120 million tons by 2030. Regional emissions from the power sector are still projected to be over double that target. Since many utilities do not update resource plans annually **it may be several years before we see the long-term emission reduction impacts of the BIL and IRA in these projections.** However, we have [already seen an increase in the long-term forecast for solar generation](#) in the Southeast, likely driven by federal policy.

To learn more, continue reading the blog post [here](#).

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About Southern Alliance for Clean Energy

Since 1985, Southern Alliance for Clean Energy has worked to promote responsible and equitable energy choices to ensure clean, safe, and healthy communities throughout the Southeast. Learn more at cleanenergy.org.