

# THE DIRTY TRUTH

## *About Utility Climate Pledges*

October 2023



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# KEY FINDINGS

## *The Dirty Truth About Utility Climate Pledges 2023 Report*

2021	2022	2023
F	D	D

The utilities studied scored 26/100 in the Sierra Club's Dirty Truth Report, earning a D. These utilities have only improved their overall score by 9 points since 2021.

### BY 2030, THE 50 UTILITIES MOST INVESTED IN FOSSIL FUEL GENERATION ARE...



Only committed to retiring **35% of their coal.**



Only building enough clean energy to replace **30% of their fossil fuels.**



Planning to build **53 gigawatts of new gas,** even more than last year.



**Only 10 of these utilities are committed to reducing their emissions by 80% by 2030,** which science tells us is necessary to limit heating to 1.5° C.



These 10 utilities with the strongest climate goals receive a combined score of 48, far outperforming the rest.



Utilities without any climate goal at all score far worse, receiving a O.



Together, we achieved the largest investment in our climate and clean energy in US history through the **Inflation Reduction Act (IRA), putting hundreds of billions of dollars** toward programs to spur the clean energy transition. This law should be a catalyst that accelerates plans for a clean energy transition from utilities that have previously lagged, saving customers money and reducing climate pollution.

# EXECUTIVE SUMMARY

The electric sector is one of the largest sources of climate-destabilizing greenhouse gas pollution in the US, and rapidly cleaning it up is key to achieving our climate goals. Utilities must lead this transition, but our research shows that despite landmark investments, many utilities are unprepared to meet this critical moment.

The evidence that we must transition to clean energy to protect our communities, health, and planet is undeniable.<sup>1, 2, 3</sup> President Biden has responded to strong public support for climate action and committed the US to achieving 100 percent clean electricity by 2035, with an important milestone of 80 percent clean electricity by 2030.<sup>4, 5</sup> This year, the Biden Administration's Environmental Protection Agency (EPA) has also taken meaningful action to cut greenhouse gas pollution from coal and gas power plants, proposing new federal carbon pollution standards for coal and gas power plants.<sup>6</sup>

In 2022, we achieved the largest investment in our climate and clean energy in US history through the Inflation Reduction Act (IRA), putting hundreds of billions of dollars toward programs to spur the clean energy transition. When he took office, President Biden established the Justice40 Initiative, which directed his administration to deliver 40 percent of climate and clean energy investments to "disadvantaged communities".<sup>7, 8, 9</sup> The IRA delivers on that in part through programs to reduce pollution, lower energy costs, create jobs and economic development, and strengthen climate resilience in communities that have previously been overburdened by pollution and underserved by federal investments. Utilities that have previously lagged must use the IRA as a catalyst to accelerate plans for a clean energy transition.

Have utilities updated their energy plans since the passage of the IRA a year ago to lower costs for families and take advantage of the bill's game changing clean energy incentives, or are they stuck in the past, clinging to outdated assumptions and technology in their plans? We are in a critical decade to phase out dirty, polluting energy generation and invest in clean wind and solar power. While many utilities acknowledge the need to reduce emissions and have made public commitments to address climate change, their plans reflect a different reality of insufficient ambition and stalled progress.

In this report, we evaluate the plans of 77 utility companies owned by the 50 parent companies most invested in coal and gas to see if they are successfully preparing for the clean transition. Utilities are scored in three categories: (1) plans to retire existing coal generation, (2) plans to build new gas capacity, and (3) plans to build new wind and solar generation. Companies gain points for retiring coal and building clean energy, and lose points for expanding gas.

Overall, we found that the plans companies release do not align with what is needed to transition away from fossil fuels. Collectively, these companies scored only 26 points out of 100, earning a D. Since our last report in 2022, scores have improved by only 5 points. Compared to the first year of this report, two and a half years ago, utilities' scores have only improved 9 points. Even though we are already well into this pivotal decade for urgent action, companies continue to lag in their plans for a transition to clean energy. With recently passed legislation, including the IRA, clean energy is the cheapest option by far.<sup>10, 11</sup> Continuing to delay is unacceptable.

## STUDY SCOPE

**50 parent companies** most invested in fossil fuel generation, comprised of **77 operating companies**, that own **half of all remaining coal and gas generation in the US.**

We analyzed their plans, as of July 1, 2023 to:

- 1. Retire coal**
- 2. Stop building new gas plants**
- 3. Build clean energy and storage**

through the end of this **crucial decade (through 2030).**

# IMPACT OF THE IRA

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“We have a once-in-a-lifetime set of incentives that are on the table. The biggest risk for ratepayers would be a failure to capitalize on that right now.”

— SAM WALSH, Department of Energy General Counsel<sup>12</sup>

The IRA, passed in August 2022, invests hundreds of billions in energy and programs to address climate change. Critically for the power sector, the bill includes a multitude of provisions that support utilities’ transition to clean energy.<sup>13</sup> Together, the IRA’s programs could put us on a path to up to 85 percent clean power and an economy-wide net greenhouse gas (GHG) emissions reduction of about 40 percent by 2030.<sup>14, 15, 16</sup> This represents most of the reductions we need to achieve the US’ commitment under the Paris Agreement of reducing greenhouse gas pollution 50 to 52 percent by 2030 relative to 2005 levels.<sup>17</sup> The power sector accounts for the largest share of these potential emissions reductions, highlighting the crucial role of utilities in accelerating the clean energy transition.<sup>18, 19</sup>

Some of the key opportunities for utilities in the IRA include:<sup>20</sup>

- Providing support and stability to develop clean energy through additional tax credit options for wind, solar, and storage projects and extending tax credits through 2033. These tax credits lower a project’s cost by a minimum of 30 percent if labor requirements are met.<sup>21</sup>
- Increasing available tax credits to up to 50 percent for projects built with materials sourced in the United States and in designated “energy communities”,<sup>22</sup> which will boost US manufacturing and investment in impacted communities.<sup>23</sup>
- Boosting access and incentives for renewable energy in low-income and Indigenous communities by covering 40 to 50 percent of the cost for up to 1.8 GW of solar, wind, and battery projects per year.<sup>24</sup>
- Allowing nonprofit rural electric and municipally owned utilities, who serve nearly one-third of homes, to move away from fossil fuel power and build solar, wind, and storage, lowering electric bills and reducing air and water pollution.<sup>25, 26</sup>
- Funding \$30 billion in grant and loan programs for states and electric utilities to decarbonize the grid through investments in renewable power and clean technologies.
- Increasing funding for energy efficiency programs, which drive down customer costs and help stabilize electricity demand.

With opportunities of this magnitude, every utility should be revisiting its energy plans in order to take the new landscape into account, even if an update to its plans was not scheduled at this time. The scale of the incentives in the IRA drastically shifts the economics of clean energy and creates new opportunities to reduce pollution while bringing more affordable and reliable energy to families across the country. Failure to take this into account by continuing to propose new gas plants and extend the life of expensive coal plants is not only economically irresponsible, but perpetuates existing inequities.

Today, despite reductions in air pollution overall, Black, Asian, Hispanic, Latino, and low-income communities are still exposed to higher levels of dangerous particulate matter pollution than other groups, and are at higher risk for health and environmental harms.<sup>27, 28</sup> The increased financial incentives available for clean energy projects, facilities, and technologies located in “energy communities” can help reduce pollution, drive economic development, and bring family-sustaining jobs to communities that need them most.<sup>29</sup> If utilities fully utilize the incentives in the IRA, they can save households hundreds of dollars in annual energy costs, create good paying jobs, and reduce climate pollution for all communities at the same time.<sup>30, 31</sup> Given this information, did utilities reflect the scale of the opportunity in front of them and make significant progress in planning for a clean energy transition?

# SLOW UTILITY PROGRESS

Utilities were scored in three categories: (1) plans to retire existing coal generation, (2) plans to build new gas capacity, and (3) plans to build new wind and solar generation, all by the end of 2030. Companies gained points for retiring coal and building clean energy, and lost points for expanding gas.

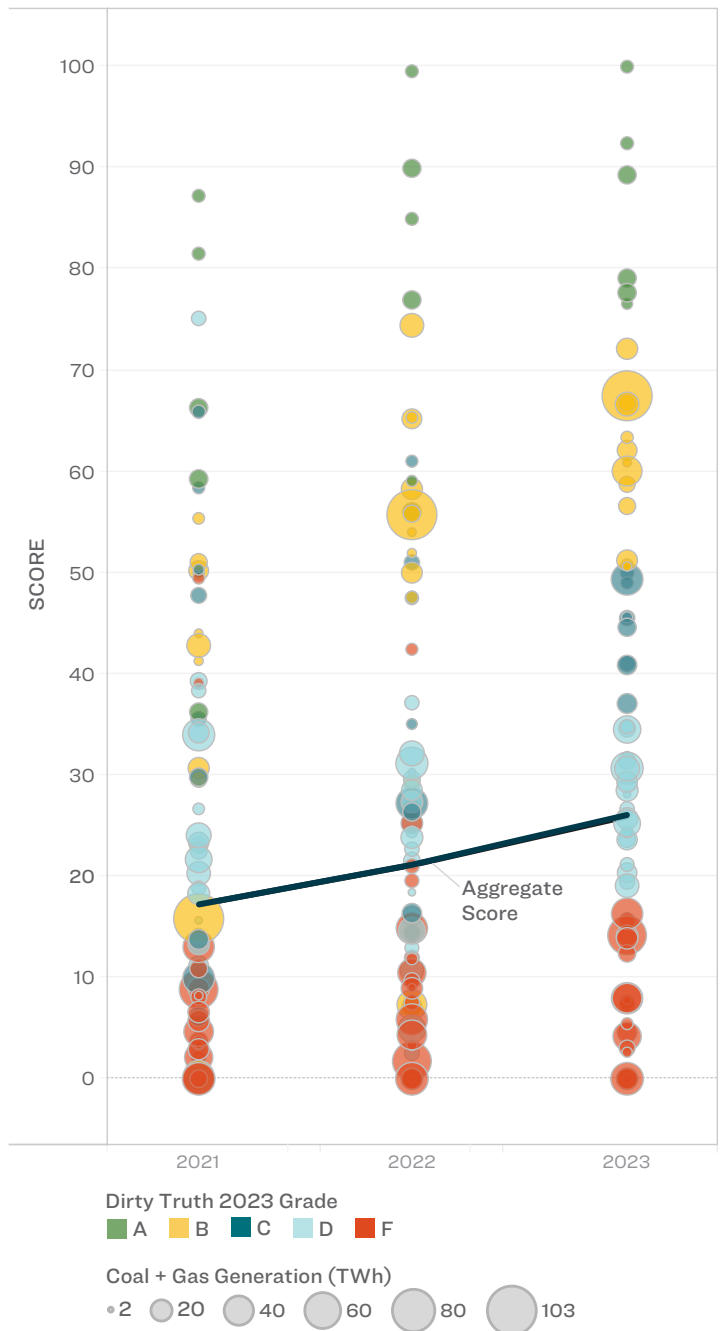
Overall, utilities scored a 26 out of 100 in this year's assessment, only 5 points higher than last year, when their score was 21.<sup>32</sup> This is only a 9 point improvement since 2021, when the aggregate score was 17.<sup>33</sup> This persistent low score makes clear that the vast majority of these utilities are still not on a path to achieving 80 percent clean electricity by 2030, in line with President Biden's commitment.

Number (%) of companies with scores that ____ since the last report:		
Improved	Made No Progress	Worsened
44 (57%)	9 (12%)	24 (31%)

As we rapidly approach 2030, utilities should be well underway with their clean energy transition, not still in the infancy of their planning. Yet of the 77 utilities we studied, 33 either made no progress or received a lower score than in our previous report. This sluggish progress over the last year is particularly concerning, given the drastic change in the planning landscape due to the passage of the IRA. Of the utilities considered, 30 filed updated planning documents since the passage of the IRA. We would expect these utilities to see a significant jump in their score from incorporating the IRA in their most recent planning. However, these utilities score a 27, only 1 point higher than the aggregate score of all companies combined.

Utilities have plans to retire 35 percent of their existing coal capacity by 2030. This leaves two thirds of coal online beyond 2030, when the International Energy Agency says advanced economies, like the US, must retire all unabated coal.<sup>35</sup> For years, the majority of coal plants in the US have been more expensive to run than to replace with renewables. In 2019, this was true for 62 percent of coal capacity. Today, with the IRA taken into account, 99 percent of all coal plants are more expensive to run than to replace with new solar, wind, or energy storage.<sup>36</sup> Keeping coal online is also deadly for the public. The remaining coal plants without plans to retire by 2030 are responsible for about 3,800 premature deaths per year due to particulate pollution. The utilities causing the most harm are not planning to do enough (or anything) to change, even when the economics clearly

**Figure 1: Aggregate Score Across Companies and Individual Company Score Distribution Over Time<sup>34</sup>**

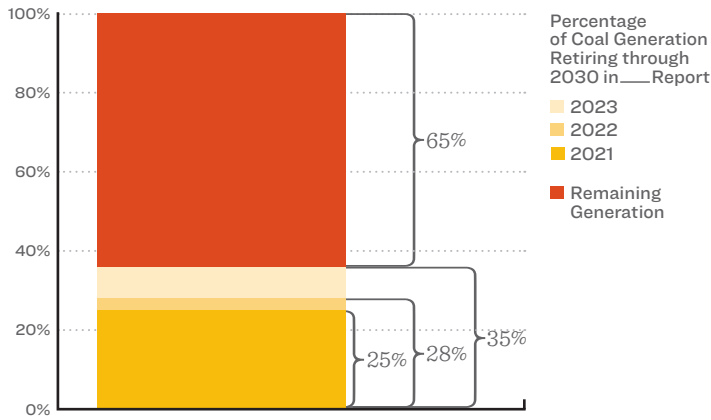


suggest they should.<sup>37</sup> Only 20 of the 77 companies (26 percent) have plans to be entirely coal-free by 2030.

The IRA also substantially reduces the cost of clean energy compared to new gas plants. Even before IRA incentives, new gas plants were a bad economic choice, with 72 percent of new gas plants outcompeted by a portfolio of clean energy resources.

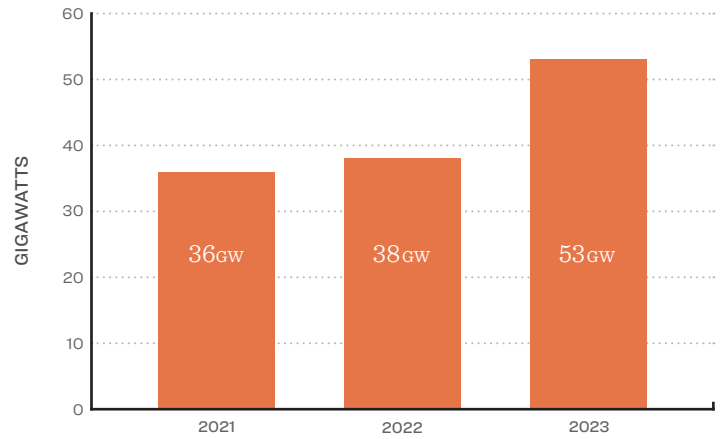
**Clean energy is cheaper than 99 percent of existing coal plants and new gas plants.<sup>38, 39</sup>**

**Figure 2: Coal Retiring by 2030**



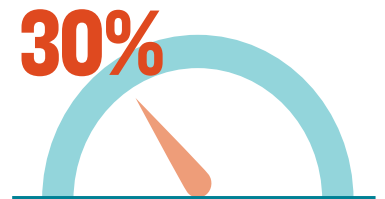
Today, with the IRA taken into account, 99 percent of new gas plants are more expensive than a clean energy alternative.<sup>40</sup> Transitioning to a cleaner electricity mix also insulates ratepayers from swings in their electric bills due to volatile gas prices and potential impacts of stronger air pollution standards.<sup>41,42</sup> Despite this, 49 of the 77 operating companies are ignoring the economics and the risks, and are still planning to build 53 GW of new gas plants through 2030. This is significantly more capacity than these utilities planned a year ago (38GW). This demonstrates a troubling trend in this set of utilities who plan to add more uneconomic gas instead of fully investing in the transition to clean energy.

**Figure 3: Planned Gas Through 2030**



Utilities are planning to build more clean energy than ever before, proposing 386 million MWh of new clean energy come online through 2030. However, this still falls far short of what is necessary. Compared to current fossil fuel generation, this proposed clean energy is only enough to replace 30 percent of existing fossil generation, far from the amount needed to achieve the US' climate goals.

These utilities are only planning enough clean energy to replace



of their coal and gas generation by 2030.



PHOTO: AL BRADEN, ALBRADENPHOTO.COM

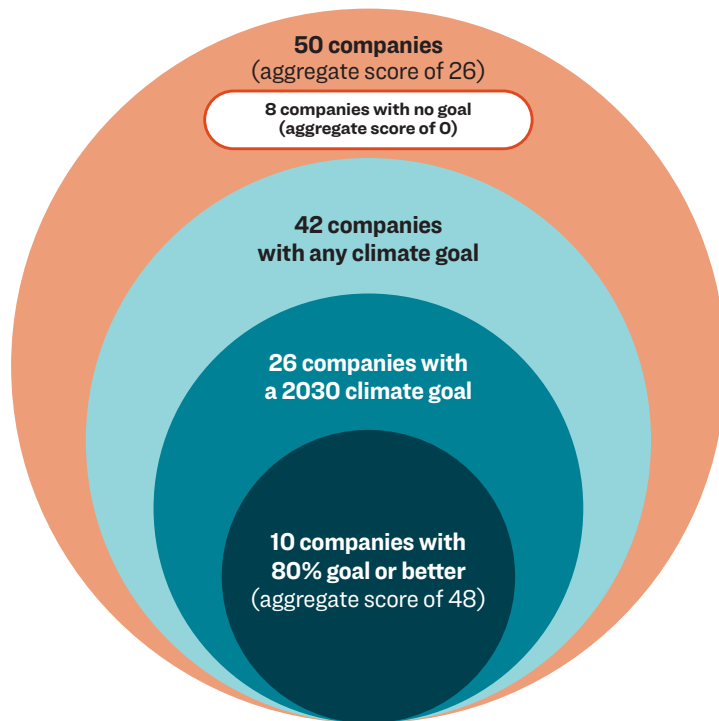
# UTILITY GREENWASHING

Of the 50 parent companies examined in this study, 42 companies had some form of climate pledge, target, or aspirational goal. This is slightly higher than last year, when 40 companies had a climate pledge of some kind. A climate goal must meet three criteria in order to be meaningful:

- It must apply to all subsidiary companies.
- It must include regular interim targets, including at least 80 percent emissions reductions by 2030, not just long-term 2050 goals.
- It must provide regular updates and a comprehensive plan for how the target will be achieved, backed by concrete planning and procurement commitments.

While climate pledges can be an important tool for making sure utility planning achieves desired outcomes, climate pledges are not helpful if they do not set near-term goals. Of the 42 companies with a climate pledge of some kind, 26 had goals with milestones within this critical decade (2030 or earlier), compared with 23 in last year's report. For companies that do have goals for 2030, these goals must be at the necessary level of ambition to address the climate crisis and meet President Biden's goal of 80 percent clean electricity by 2030; only ten companies had goals ambitious enough to meet the scale of change we need.

Figure 4: Company Climate Goals



## TRADE ASSOCIATION OPPOSES PROGRESS

Edison Electric Institute (EEI) is a utility trade association representing investor owned utilities (IOUs) that has recently taken multiple actions that are clearly in opposition to a clean energy transition. All 29 of the IOU parent companies included in this report are members of EEI. Recently EEI submitted comments opposing EPA's standards for controlling greenhouse gas pollution from coal and gas power plants and hired a former Trump Energy Secretary as its president.<sup>43, 44</sup> If utilities are serious about their commitments to a clean energy transition, they cannot be members of EEI as it takes these actions that are clearly opposed to such a transition.

While utilities tout their climate pledges as signs that they are committed to a clean energy transformation, these goals are only greenwashing unless utilities' actual plans for the future reflect pathways to make those goals reality. Of the parent companies with a climate goal of any kind, only one received an A (NiSource, parent of Northern Indiana Public Service Company<sup>45</sup>). The majority received a D (26 percent) or an F (31 percent). Unfortunately, this is a similar outcome to last year, when only one company (NiSource) received an A and 70 percent received a D or an F.

Although climate goals are not leading to sufficient action, parent companies with no climate goal perform even worse in our analysis. These companies receive an aggregate score of zero points, and nearly all receive an F.<sup>46</sup> This performance is actually worse than last year, where companies lacking a climate goal scored six points. On the other hand, parent companies with goals specifying emissions reductions of at least 80 percent by 2030 outperform others with an aggregate score of 48 points. This is an improvement since last year when they scored 43 points. Based on our assessment, companies that set strong, near-term goals are taking more action to transition to clean energy; companies that are delaying action try to hide behind general, long-term climate pledges. Rhetorical climate goals only serve to mislead customers and investors if they are not accompanied by concrete actions.





PHOTO: TREVOR ADELIN, ALAMY.COM

## CONCLUSION

Utilities are still dragging their feet on the clean energy transition. By delaying the retirement of coal, continuing to plan for more gas, and wasting critical time in incorporating IRA incentives for clean energy, these utilities are setting us on a collision course with the worst impacts of the climate crisis. In this report, we looked at 77 companies that are responsible for over half of US coal and gas generation. These companies score a dismal 26 out of 100. This low score has barely improved since our first *Dirty Truth* report two and half years ago, increasing only 9 points since then. There is no time to waste. The IRA's groundbreaking provisions offer an opportunity for utilities to rework their plans and move to clean energy, which would save their customers money and improve their health. Despite utilities

continuing to publicly promote their climate goals in the last year, the aggregate score showed little improvement, demonstrating once again that utilities are not pairing their climate goals with sufficiently ambitious, tangible actions. Of the parent companies with climate goals, 57 percent received a D or F, while only one received an A, showing that these climate goals are mainly greenwashing. Instead of utilizing IRA's provisions to plan for a clean energy transition, utilities spent the last year hanging on to costly, polluting coal plants, doubling down on fossil fuels with plans for new gas plants, and missing out on the benefits of building clean energy at the scale and pace needed. Utilities must swiftly rectify this by updating their plans to include the IRA's incentives and plan for 80 percent clean electricity by 2030.

## CASE STUDY: AMEREN MISSOURI MUST ACT ON IRA

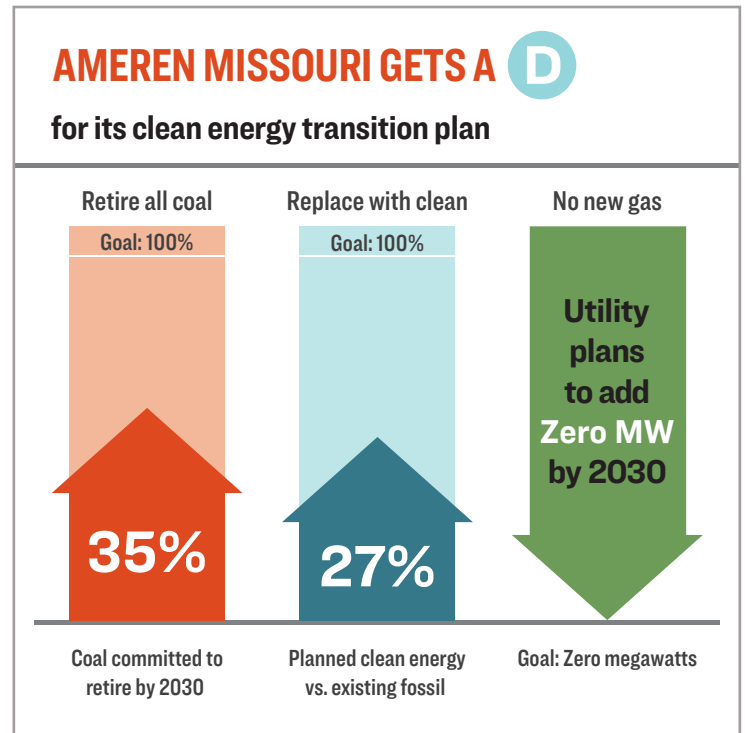
Ameren Missouri scores 31 points, receiving a D for its plans. Compared to its score last year, 32, this score shows no progress over the past year.

Last year Ameren retired the Meramec coal plant, an important step forward. However, Ameren still has three coal plants in operation, Rush Island, Sioux, and Labadie. Rush Island is proposed to retire in 2024, and Sioux is proposed to retire in 2030. Labadie, the second deadliest coal plant remaining in the US, which causes nearly 200 deaths each year from air pollution, is not proposed to fully retire until after 2040.<sup>47</sup> Roughly half of the energy that Ameren sells each year is generated at Labadie;<sup>48</sup> Ameren's scheduled coal retirements by 2030 only represent 35 percent of its total coal-fired generation. To make matters worse, Labadie lacks all modern pollution controls, including industry-standard selective catalytic reduction and flue gas desulfurization systems that would reduce negative health impacts for vulnerable populations.

Disturbingly, the pollution from Ameren's continued coal-burning contributes to disproportionately negative health impacts on communities of color.<sup>49</sup> Labadie is located upwind of St. Louis, Missouri; the EPA's EJScreen tool shows that populations in St. Louis have high environmental justice index values accounting for both exposure to pollution and other socioeconomic indicators.<sup>50</sup>

Black individuals in St. Louis are eight times more likely to go to the emergency room for asthma compared to their white counterparts.<sup>51</sup> The disparity is even wider for children; Black children in St. Louis are 10 times more likely to visit the emergency room for asthma than white children.<sup>52</sup> In Missouri, asthma death rates for Black people are quadruple those for white people.<sup>53</sup>

By 2030, Ameren plans to bring 2,800 MW of solar and wind online; however, this is only enough to replace 27 percent of its current fossil fuel generation, leaving a huge gap to fill. Because this report assesses companies' plans through 2030, Ameren's grade in this report does not include the utility's plan to build a 1,200 MW combined cycle gas plant in 2031. Ameren's goal of "net-zero" carbon emissions by 2045 is already too far off into the future in order to meaningfully address climate change, and the utility has no public plan to achieve this goal. Adding a new gas plant, that would presumably operate well beyond 2045,



puts achieving its "net-zero" goal further out of reach and locks customers into volatile gas prices.

Ameren must build clean energy on a larger scale and commit to a faster transition away from burning fossil fuels. Ameren can make these commitments while saving its customers money, and with the IRA in place, the possible savings are even higher. Ameren released its latest long-range energy plan at the end of September, after this report was completed.<sup>54</sup> Ameren should have used that planning process to rapidly accelerate its transition to renewable energy and its plans to retire its deadly Labadie plant. Recent analysis shows that Ameren should evaluate earlier retirement dates for the Sioux and Labadie coal plants based on Sioux's poor economics, Labadie's environmental compliance requirements, and low-cost replacement options for both, particularly with the generous subsidies offered in the IRA.<sup>55</sup> Ameren itself has noted that "The Company expects significant net benefits to exist over the next 10 years because of the IRA and the Company's expected development of significant new renewable generation resources will benefit from its tax credit provisions."<sup>56</sup> Ameren must fully take IRA provisions into account, plan for development of more cost-effective clean energy, and accelerate the transition away from fossil fuels.

## CASE STUDY: DUKE CONTINUES TO LAG, FAILING TO FULLY INCORPORATE IRA

Duke Energy Corporation's subsidiaries include five investor-owned utilities: Duke Florida, Duke Indiana, Duke Kentucky, Duke Carolinas, and Duke Progress (which also operates in the Carolinas).<sup>57</sup> Combined, these utilities received a D (18) for their plans to transition to clean energy. While this is an improvement from last year and the year before, when Duke received an F (with a score of 13 and 2 respectively), Duke still scores below the average utility (31) and has not fully incorporated the IRA into its most recent plans, leaving Duke with a long way to go.

Duke Progress has the best score out of Duke's subsidiaries, earning a D (35). Duke Indiana also received a D (26), followed by Duke Carolinas, Duke Kentucky, and Duke Florida, which all received an F (each with a score of 8).

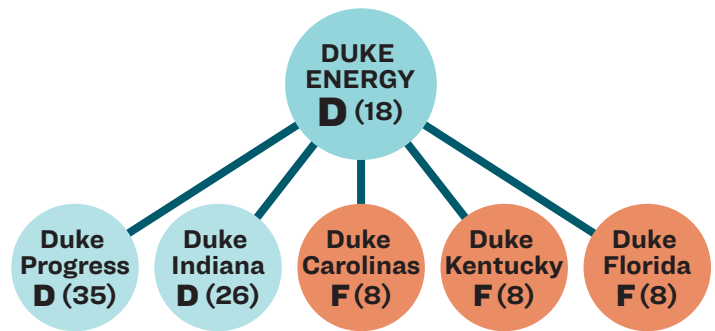
Duke has the most coal capacity out of any parent company studied with over 17,000 MW of coal online. Duke has plans to retire only 30 percent of the generation from those coal plants by 2030. Duke's coal plants harm the communities around them; the plants that Duke does not have plans to retire by 2030 cause an estimated 176 premature deaths each and every year they operate.<sup>58</sup>

In addition to keeping coal online, Duke is digging itself deeper into fossil fuel reliance with plans to build over 5,500 MW of new gas plants through 2030 and another about 800 MW after 2030. Duke has the second most planned gas through 2030 out of any parent company in this report. Duke Carolinas and Duke Progress are responsible for the vast majority of this, with plans for about 4,000 MW of new gas plants by 2030. Duke Carolinas recently announced that they will be moving forward plans for building this new gas generation by filing Certificates of Public Convenience and Necessity (CPCNs) before the end of this year.<sup>59</sup> Duke Indiana is planning most of the remainder, about 1,600 MW.

**Duke needs five times as much as its current planned clean energy buildout to replace its massive amount of fossil fuel generation.**

Duke does have plans for a large buildout of clean energy, estimating about 12,000 MW of new wind and solar through 2030. This is a sizable buildout, ranking Duke the fourth largest planned clean buildout out of the parent companies in this report. However, because Duke has so much generation from fossil fuels, this buildout can only replace 21 percent of its fossil generation with clean energy. Duke needs five times as much as its current planned clean energy buildout to

Figure 5: Scores for Duke Energy and its subsidiaries



#1 for most coal generation without a retirement date by 2030.

#2 for most planned gas capacity through 2030.

#4 for planned clean energy through 2030.

replace its massive amount of fossil fuel generation. Instead of fully leaning into building clean energy, Duke is clinging on to fossil fuels, opposing proposed carbon pollution standards from the EPA for new and existing fossil fuel power plants.<sup>60</sup>

Duke Progress saw the biggest change in score, increasing from a 5 last year to its current score of 35. This was driven by Duke Progress's new plans committing to retire over 60 percent of its remaining coal generation by 2030 (compared to none last year) and increases in its clean energy plans (amounting to enough to replace a quarter of its fossil generation). These are positive steps forward, but Duke Progress also increased its plans for new gas plants, backsliding in that respect.

The latest plan from a Duke subsidiary, the 2023 Carolinas Resource Plan (released in August 2023, after the data cutoff for this report), fails to fully incorporate the benefits of the IRA.<sup>61</sup> While Duke claims that it is "leveraging Inflation Reduction Act (IRA) benefits and incorporating them into integrated resource plans and rate adjustments across jurisdictions", Duke does not fully include key opportunities available through the IRA like bonus credits for clean energy built with domestic content or in "energy communities."<sup>62</sup> With this poor incorporation of IRA, Duke recommends devastating outcomes in its plan; Duke suggests delaying coal retirement dates, building over 3,500 MW of additional new gas after 2030, and reducing its plans for clean energy buildout. While we hoped to see improvement in Duke's latest plan, Duke is instead moving backwards.<sup>63</sup>

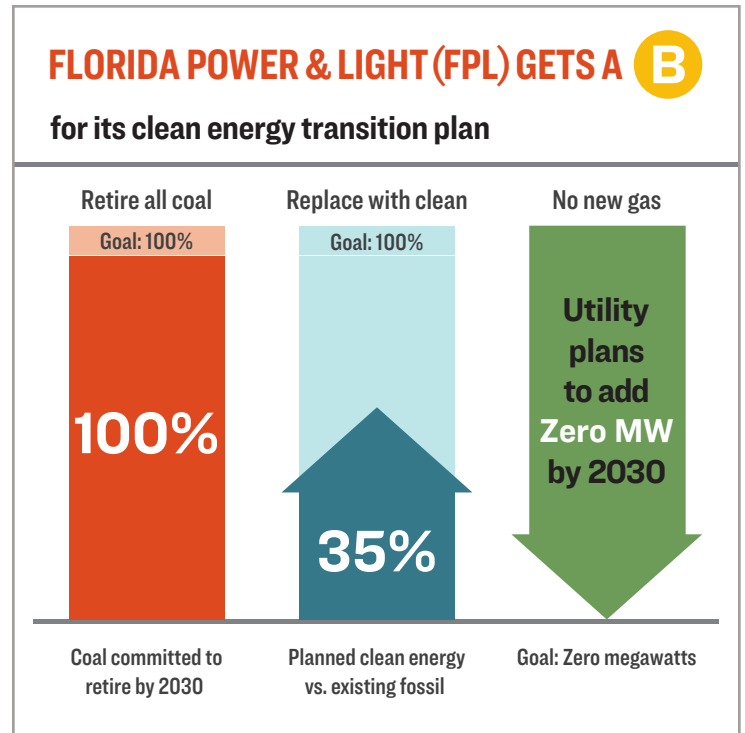
In all of Duke's subsidiaries next planning processes, Duke should fully incorporate the IRA provisions to speed up coal retirements, plan for additional clean energy buildout, and stop the plans for new gas plants.

## CASE STUDY: FLORIDA POWER AND LIGHT (FPL) MAKES CONTINUED PROGRESS

Florida Power and Light (FPL), a subsidiary of NextEra, scored 67 points, receiving a B for its plans. This shows progress compared to a score of 56 last year. FPL is one of the leading utilities in transitioning to clean energy, with the 8th highest score of the 77 utilities scored in this report.

FPL earns a B in large part due to its plans to retire all of its coal plants by 2030. FPL owns part of unit 3 at Scherer, which it plans to retire in 2028. FPL also owns part of Victor J Daniel, which it plans to exit in 2024, with full retirement scheduled for 2027.<sup>64</sup> FPL has no plans to bring new gas plants online in the future. However, since 2019 FPL built three large new gas plants — Okeechobee, Dania Beach, and Gulf CT (Crist) — totalling nearly 4,000 MW of new gas capacity. These historic investments have increased the total amount of clean energy FPL will need to build in order to replace all of its fossil generation with truly clean energy. FPL is also pursuing upgrades at existing gas plants before 2030;<sup>65</sup> while not technically new gas plants, these are investments in additional fossil fuel capacity when that money would be better spent on clean energy.

As part of NextEra's "Real Zero" commitment to eliminate carbon emissions by 2045, FPL plans to bring over 15,000 MW of clean energy online by 2030. This buildout is enough to replace about a third of FPL's existing fossil generation, meaning it will need to triple this amount to achieve full replacement. This is a significant improvement from last year, when FPL had plans for a clean energy buildout that would replace only 16 percent of its fossil generation. This increase has been driven by cost reductions for clean energy, which were accelerated with the provisions of the IRA. NextEra estimates show solar and wind paired with batteries are about 35 percent to 44 percent lower cost after the IRA.<sup>66</sup> FPL has already passed some savings from IRA tax credits for renewables along to customers, saving customers millions of dollars over the next few years.<sup>67</sup>



While NextEra's "Real Zero" commitment and accompanying plan is ambitious, there are missing elements to the plan including:<sup>68</sup>

- Details on how the plan will incorporate energy efficiency to address high energy burdens.
- Incorporation of customer-owned rooftop solar into the plan.
- Assessment of how NextEra's involvement in Mountain Valley Pipeline contradicts the plan.
- Specifics on how NextEra will define green hydrogen to make sure it is a true climate solution, not greenwashing.

Moving forward, Florida Power and Light should incorporate these missing elements into its planning, continue to expand its clean energy buildout, and keep the gas plant buildout in the past.

## APPENDIX A: METHODS UPDATE

We analyzed investor-owned utilities, public power utilities (such as Tennessee Valley Authority), generation and transmission cooperatives, and large municipal utilities. These utilities all seek some form of rate recovery for their generation resources. They are all responsible for the resource adequacy of their generation supply, which means that when they plan retirements of coal and gas plants, they are responsible for building or sourcing replacement energy and capacity to comply with their resource adequacy requirements. We did not study any purely merchant generating companies.

We limited our study to the top 50 parent companies as ranked by remaining coal and gas under ownership as of the first version of the report, in 2021. As of 2021, these companies accounted for roughly 50 percent of all remaining coal and gas generation in the country.<sup>69,70</sup> We included 77 operating companies and 93 unique owners operating under the 50 parent companies.<sup>71</sup> We only looked at coal and gas plants under direct ownership by these utilities and did not study power purchase agreements with coal and gas plants or other wholesale contracts or purchases of unspecified power.

Using S&P Global Market Intelligence’s database, we aggregated coal and gas generation by owner, operating company, and parent company for the calendar year 2022.<sup>72</sup> The Coal Creek and Merom coal plants were included in the sample as operating plants without a retirement date prior to the end of 2030 because the previous owners sold these plants, despite having announced retirement plans prior to the sale, and the new owners have not announced plans to shutter these plants

prior to 2030. Going back on retirement commitments by selling coal plants that will then continue running does not count as a retirement.

To quantify clean energy plans, we tracked integrated resource plans (IRPs) for those utilities that file them publicly, as well as corporate announcements of clean energy projects and planned clean energy projects listed in S&P Global. We included planned renewables regardless of whether the utility plans to build the project itself or buy renewable energy via a power purchase agreement. We aggregated the amount of wind and solar capacity planned by each utility in 2023 through 2030. Clean energy was assumed to be built in the primary state in which the utility operates.<sup>73</sup> To calculate total clean generation from nameplate capacity, we used a set of state-specific capacity factors for onshore and offshore wind and utility-scale and distributed solar. Capacity factors were updated using the latest market capacity factors from the National Renewable Energy Laboratory’s (NREL) 2022 Annual Technology Baseline (ATB) to reflect the latest state of the market and the capacity factors most likely used in utility planning.<sup>74</sup> ATB capacity factors were mapped to each state based on the average state resource class assumed by RMI in its Clean Energy Portfolio Model (CEPM).<sup>75</sup>

Planned gas data included any new gas capacity that had been proposed by a utility in an IRP or other publicly available source. Planned gas included new gas capacity in any stage before operation (i.e., included under construction). This also included coal-to-gas conversions where planned, but does not include capacity increases at existing gas plants where a new turbine is not being added.

### The overall utility score was calculated using the following equation:

$$\text{Score} = \frac{\frac{\text{Clean planned [MWh] (2023-2030)}}{\text{Existing coal + gas [MWh] (2022)}} + \frac{\text{Coal committed to retire by 2030 [MWh]}}{\text{Existing coal [MWh] (2022)}} - \frac{\text{Planned gas by 2030 [MW]}}{\text{Existing coal + gas [MW] (2022)}}}{2} * 100$$

All data is up to date as of July 1, 2023.

Points are earned by retiring coal and building clean energy through 2030, while points are lost by building new gas in that timeframe. The scores are divided by two to maintain a scale of 0 to 100. Each component of the score is capped

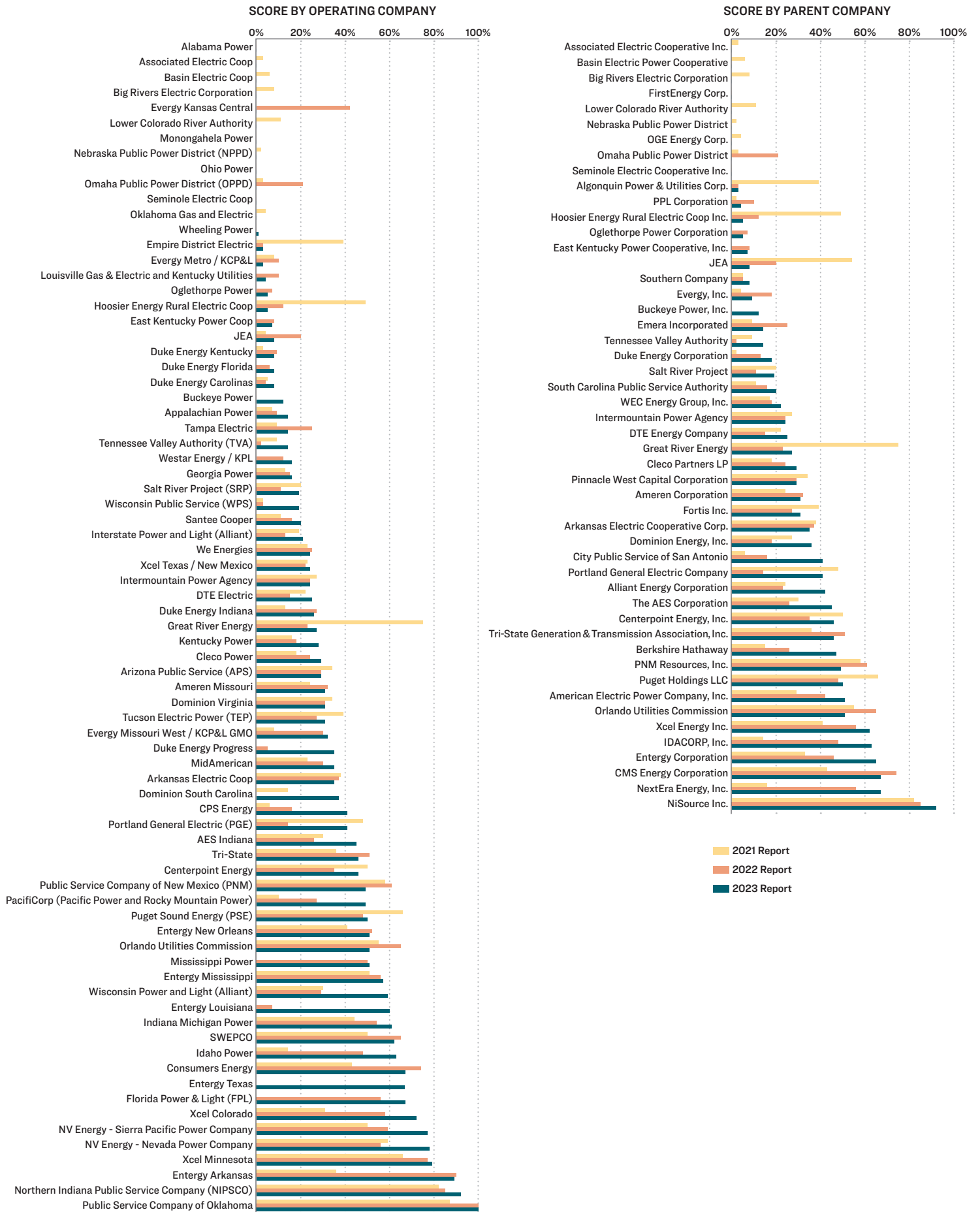
at 100, and if a score is below 0 due to high gas penalties, then the company receives a 0. While the clean energy and coal components of the score are in terms of generation (megawatt hours), the gas component of the score is in

terms of capacity (megawatts), as it is unclear how much each new gas plant would run (i.e., its capacity factor). A perfect 100 is achieved if a company commits 1) to retiring all of its coal, 2) to not building any new gas, and 3) to building an amount of new clean energy commensurate with its existing fossil fuel generation by 2030. Finally, companies are assigned letter grades according to where their score lies on the following scale:



The cutoff for a failing grade (17.5) is slightly above the aggregate score of all companies studied from the inaugural version of this report (17.2).<sup>76</sup> For further information on methods see past versions of this report.<sup>77,78</sup>

# APPENDIX B: TABLE OF RESULTS



# ENDNOTES

- 1 IPCC, 2022: [Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change](#) [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.
- 2 Trout et al., [Existing fossil fuel extraction would warm the world beyond 1.5 °C](#), Environ. Res. Lett., 2022.
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- 4 White House Briefing Room, [FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies](#), 2021.
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- 6 [EPA Proposes New Carbon Pollution Standards for Fossil Fuel-Fired Power Plants to Tackle the Climate Crisis and Protect Public Health](#), EPA, 2023.
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- 8 Office of Economic Impact and Diversity, [Justice40 Initiative](#), Department of Energy.
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- 12 Ethan Howland, [Inflation Reduction Act upends utility resource planning tenets: NARUC panelists](#), Utility Dive, 2022.
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- 14 Megan Mahajan, Olivia Ashmoore, Jeffrey Rissman, Robbie Orvis, and Anand Gopal, [Updated Inflation Reduction Act Modeling Using the Energy Policy Simulator](#), Energy Innovation, 2022.
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- 20 [Real-World Benefits of the Inflation Reduction Act’s Historic Climate Investments](#), Sierra Club.
- 21 [MEMO: Sierra Club Analysis of Inflation Reduction Act of 2022](#), Sierra Club, 2022.
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- 35 [Net Zero by 2050: A Roadmap for the Global Energy Sector](#), IEA, 2021.
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- 43 Edison Electric Institute, [Comments on EPA’s Proposed Clean Air Act Section 111 Rules for Power Plants](#), 2023.
- 44 Rachel Frazin, [Trump-era Energy secretary to lead electric utility lobby group](#), The Hill, 2023.
- 45 NiSource was the only parent company out of all 50 parent companies to receive an A. The scores assigned here do not reflect all aspects of a company’s business. While NiSource receives an A based on the factors included in our score, the score does not account for its gas utility. Emissions from NiSource’s gas customers at end use are far higher than those from electric generation. Those gas customer emissions are called “scope 3” emissions and are not included in NiSource’s climate goals ([NiSource Climate Report 2021](#), page 21).
- 46 The plans for some companies would receive negative points due to high penalties for plans to build new gas, and those companies are given a zero. When those plans are added together for an aggregate score of this group, although some companies score above a zero, the aggregate score is a zero.
- 47 Daniel Prull, [Out of Control The Deadly Impact of Coal Pollution](#), Sierra Club, 2023.
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## ENDNOTES (CONT.)

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- 62** Duke Energy, [Duke Energy details clean energy transition in Impact Report](#), 2023.
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- 64** Darrell Proctor, [More Coal Cuts—AEP, Mississippi Power Detail Closures](#), POWER Magazine, 2021.
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- 68** Susannah Randolph, [The Next Era of American Energy Generation](#), Sierra Club, 2022.
- 69** We excluded two utilities (Pacific Gas and Electric and Los Angeles Department of Water and Power) from the top 50 due to their significant amount of coal and gas purchased from power purchase agreements or bulk market purchases, which we did not account for in the scope of this study.
- 70** Based on S&P Market Intelligence, as of 2022 the companies in this report own approximately 1.3 billion MWh of the approximately 2.4 billion MWh of coal and gas generation in the US.
- 71** Full list of companies included [available here](#).
- 72** S&P Global Market Intelligence; SNL Energy Data.
- 73** For states with operations in multiple states, the average capacity factor across all states was used.
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