



ESG NET ZERO

ENERGY COMMITMENTS

BY AZ UTILITIES LIKELY

WILL DOUBLE UTILITY

BILLS WITH POOR FAMILIES

HIT THE HARDEST.

BY STEPHEN MOORE

The utilities in Arizona have committed themselves to an economically destructive environmental policy called **“Net Zero by 2050,”** which would eliminate oil, gas and coal for producing electric power. This is problematic because across the country, roughly 70% of America’s energy is generated from fossil fuels – roughly eight times more than is produced from wind and solar power.

To achieve anything close to Net Zero carbon emissions would mean that virtually all electric power purchased by Arizona utilities would have to come from “renewable energy” sources.

This study focuses on what this proposal would mean for the economy of Arizona and the cost to Arizona rate payers. We examine how Net Zero policy pursuits have worked so far in other states.



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EXECUTIVE SUMMARY

Renewable Energy Mandates (REM) policies have become commonplace in more than half the states around the country.

- Nine out of the ten states with the highest residential electricity cost have renewable energy mandates of 25% or more while seven out of the ten states with the lowest residential electricity cost have none or less than 20% renewable energy mandates.
- Over the last decade states with a high renewable energy mandate (50% or greater) have on average paid 36.4% more for electricity than states without a renewable energy mandate.
- Increased energy costs hit those in the lowest income quintile the hardest, eating up nine times more of their income than the income of those in the top income quintile.
- An independent study estimates that if fully implemented, the proposed renewable energy commitments could cost the average ratepayer 25% more on their monthly bill by 2035 and up to 78% more by 2050.

INTRODUCTION

Over the past five years there have been several thwarted attempts to establish harmful renewable energy mandates (REM) in Arizona. In 2018, a ballot measure that would have required major regulated utilities to sell 50% renewable power by 2030 was overwhelmingly rejected. In May 2021, the Arizona Corporation Commission (the constitutionally established agency responsible for regulating public utility companies) rejected a proposal to require 100% carbon-free energy, leaving in place the Renewable Energy Standard and Tariff that requires utilities get 15% of their power from renewables by 2025.

Unwilling to accept the wisdom of rejecting these costly mandates, Arizona's largest utilities have adopted Environmental, Social, and Governance (ESG) by implementing renewable energy plans of their own. Arizona Public Service Co. has pledged to achieve 100% zero-carbon electricity by 2050, while Tucson Electric Power Co. has pledged to get more than 70% of its power from wind and solar by 2035. Additionally, Salt River Project (SRP), the state's largest nonprofit electric utility, plans to reduce carbon emissions by 90% of 2005 levels by 2050.¹

The Arizona Corporation Commission has failed to intervene and block the implementation of these plans, claiming that it is not within their authority to take such action. The ACC publicized this decision in response to multiple petitions to ban the implementation of ESG by utilities under its jurisdiction.²

The ACC would be wise to reconsider their position, as there is no shortage of examples illustrating the high cost of implementing ESG. As of 2023, there are 11 states and territories in the United States that have established 100% renewable energy goals. These states include California, Colorado, Maine, Nevada, New Mexico, Oregon, Virginia, Washington, Hawaii, Louisiana, and Rhode Island. Most states have set their renewable energy targets at 40% or more, and three states have targets of at least 50%. These states are Nevada, Hawaii, and Rhode Island. Although there are a number of reasons for varying energy costs between different states, this study will demonstrate that the implementation of ESG and renewable energy mandates unequivocally increase the cost of energy. It will further show that despite the veneer of humanitarian rhetoric, these policies hurt the poorest members of society the most.

1 <https://www.eenews.net/articles/can-arizona-revive-its-bipartisan-clean-power-mandate/>

2 <https://azfreenews.com/2023/10/arizona-corporation-commission-says-it-cant-ban-utilities-esg-policies-outright/>

The Experience of Other States with Renewable Energy Mandates (REM)

The true cost of implementing renewable energy mandates, even those that are self-imposed by utility companies, is most clearly illustrated by comparing the states with the highest residential electricity rates and those with the lowest. The tables below show the ten states with the highest average electricity cost in 2022 according to the U.S. Energy Information Administration³ as well as the ten states with the lowest average electricity cost. The tables also reflect the degree to which the state has implemented a renewable energy mandate. “High” indicates a mandate to produce 50% or more renewable energy, “Medium” reflects a mandate between 25-50%, and “Low” is 25% or less. Notably, nine out of the ten states with the highest residential electricity costs have implemented medium or high renewable energy mandates. Similarly, seven out of the ten states with the lowest electricity cost have not implemented renewable energy mandates. These tables clearly illustrate that when utility companies cannot choose the lowest cost source of energy, they are forced to pass on the higher cost of inefficient renewable alternatives to their customers.

Most Expensive States:

State	REM	Electricity Price (Cents per Kilowatt-hour)
Hawaii	High	42.26
Connecticut	Medium	31.32
New Hampshire	Medium	30.67
California	High	29.78
Maine	High	29.26
Massachusetts	Medium	29.01
Rhode Island	High	26.92
Alaska	None	24.86
Vermont	High	21.03
New York	High	20.47

*9/10 have a mandatory REM. Alaska is the only state that does not.

High = 50% Mandate | Medium = 25-50% Mandate | Low = 25% or less Mandate

3 <https://www.eia.gov/electricity/data/browser/#/topic/7?agg=0,1&geo=vvvvvvvvvvvo&endsec=v&linechart=ELEC.PRICE.TX-ALL.M~ELEC.PRICE.TX-RES.M~ELEC.PRICE.TX-COM.M~ELEC.PRICE.TX-IND.M&columnchart=ELEC.PRICE.TX-ALL.M~ELEC.PRICE.TX-RES.M~ELEC.PRICE.TX-COM.M~ELEC.PRICE.TX-IND.M&map=ELEC.PRICE.US-ALL.M&freq=M&start=201201&end=202305&ctype=linechart&itype=pin&rtype=s&motype=0&rse=0&pin=>



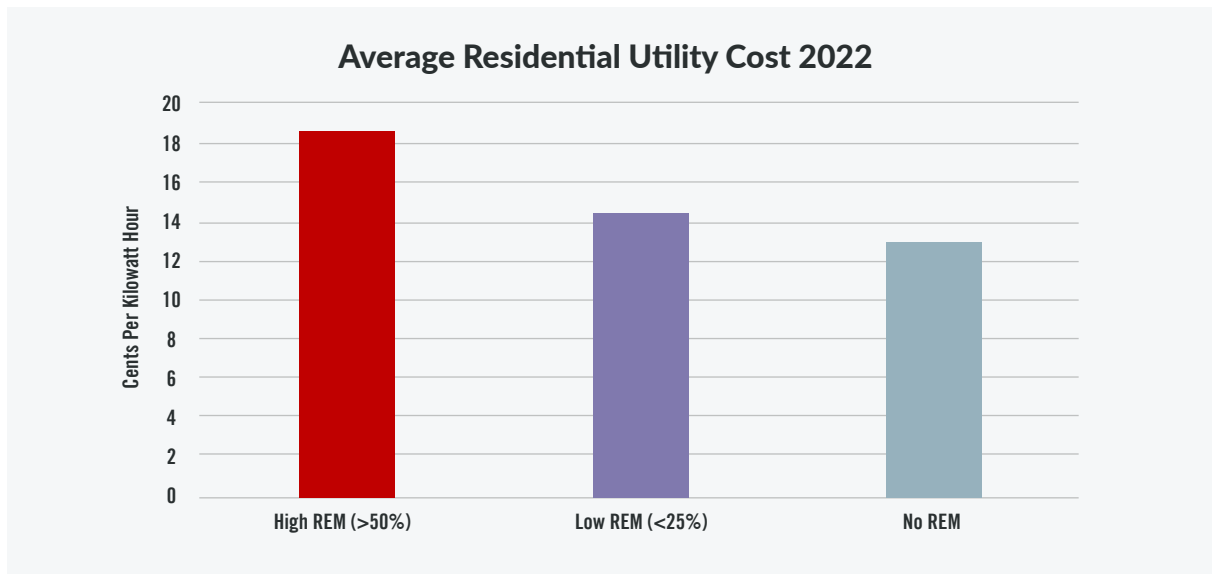
Least Expensive States:

State	REM	Electricity Price (Cents per Kilowatt-hour)
North Carolina	None	12.08
Arkansas	None	11.86
Montana	None	11.37
Oregon	High	11.35
Wyoming	None	11.1
Utah	Low	10.94
Nebraska	None	10.93
North Dakota	None	10.9
Idaho	None	10.42
Washington	High	10.23

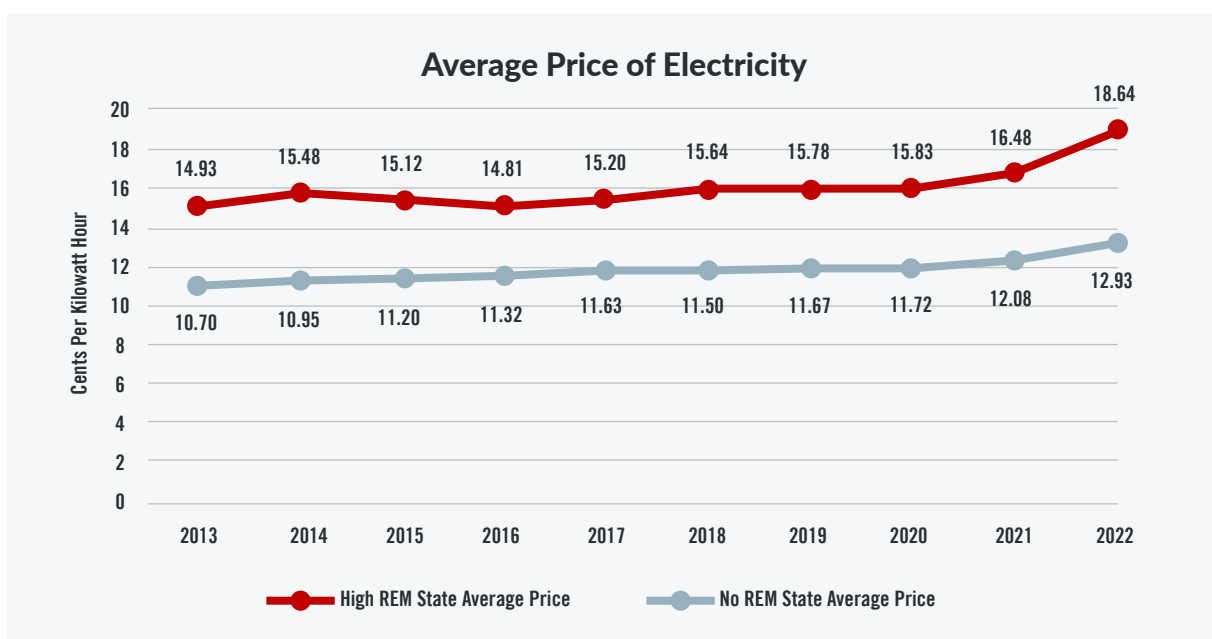
*7/10 have no REM.

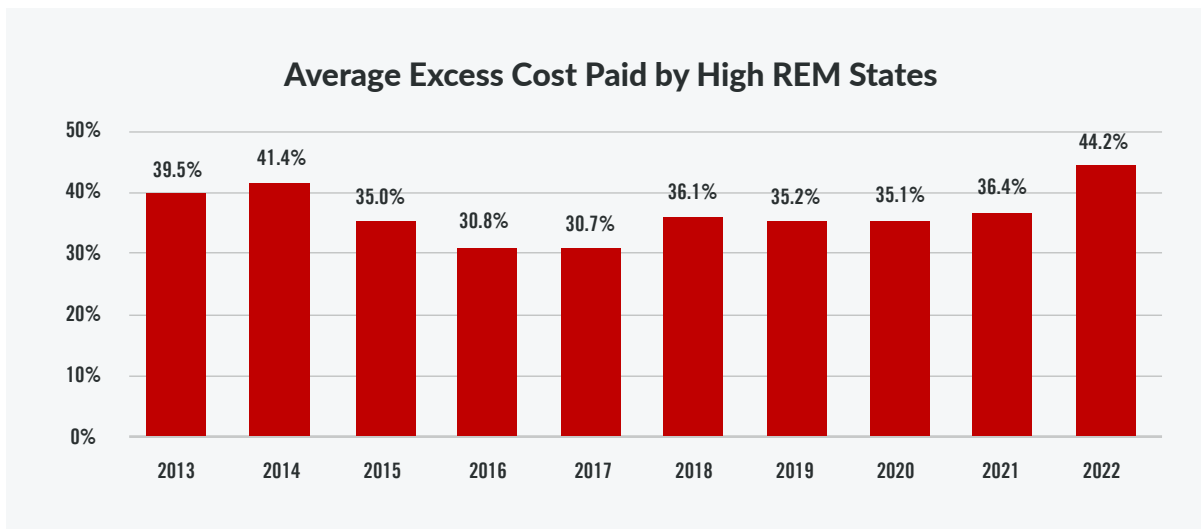
High = 50% Mandate | Medium = 25-50% Mandate | Low = 25% or less Mandate

The same fact is evident viewed through a slightly different lens. Instead of looking at the ten states with the highest electricity cost and the ten states with the lowest cost, we categorized all fifty states as either “High REM” (greater than 50%), Low REM (Less than 25%), and No REM to compare the average residential electricity rate by category. “No REM” states had the lowest average cost in 2022, at 12.93 cents per kilowatt hour. “Low REM” states were slightly higher at 14.38 cents per kilowatt hour. And unsurprisingly, “High REM” states were the most expensive at 18.64 cents per kilowatt hour, over 44% more expensive than the average “No REM” state.



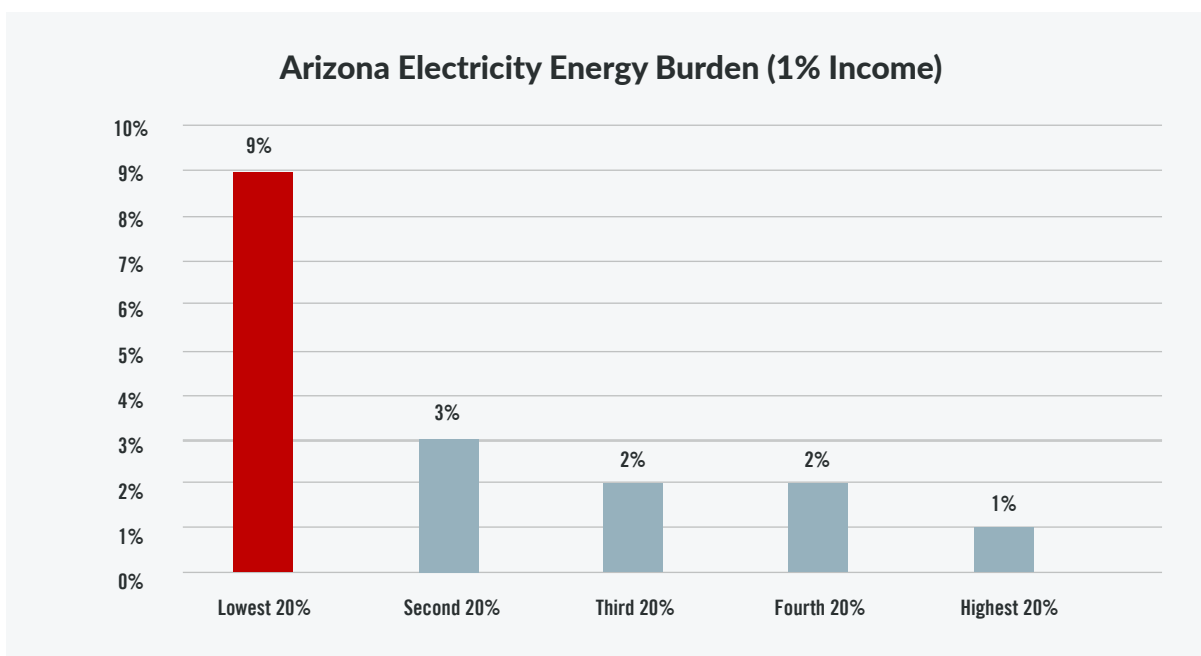
This stark difference in cost between “No REM” and “High REM” states is not a new or inconsistent phenomenon. The charts below show the difference in the average price between the two categories over the last decade. From 2013 to 2022, the excess cost paid by residents of “High REM” states has consistently ranged from 39.5 - 44.2%, with the largest increase coming during the period of 2017-2022.





Who Bears the Cost?

Proponents of implementing clean energy mandates often try to claim the moral high ground, by claiming that these policies will benefit all of humanity in the long run with cleaner air and better health, but from atop their humanitarian high horse they are blind to how truly regressive these policies are. Proportionally, the cost of implementing clean energy mandates hardly impacts the billionaires lobbying for these policies, but they fall very heavily on the poorest members of society. According to the Office of State and Community Energy Programs⁴, the cost of electricity makes up less than 1% of the household income of those in the top 20% of earners in Arizona, but over 9% of the households in the bottom 20%. This means that any increase in the cost of electricity will have a significantly greater impact on the poorer households in Arizona. It begs the question, why should wealthy liberals have the right to hand the bill to the poorest members of our country for the ineffective signaling of their non-existent moral superiority?



⁴ <https://www.energy.gov/scep/slsc/lead-tool>

The High Cost of Achieving Net-Zero

The repeated and unrelenting efforts to shackle Arizona's energy policy to the ESG ideology is merely a microcosm of a much broader effort to needlessly regulate energy production across the globe. But contrary to what the proponents of ESG claim, these efforts are far from free. A recent McKinsey study⁵ estimates that the annual cost to achieve net zero emissions, where carbon dioxide emissions are completely eliminated or offset, is \$9.2 trillion. Currently, the world expends \$5.7 trillion annually to mitigate the impact of fossil fuels and promote the use of alternative energy sources.

However, in order to fulfill ESG standards and meet the target of 1.5 degrees Celsius, it will be necessary to allocate an additional \$3.5 trillion every year from now to 2050. To put this figure in perspective, it represents half of all corporate profits reported in 2020, a quarter of total tax revenue, or approximately 7% of household expenditures. A high price to pay for liberal virtue signaling.

CONCLUSION

This study sheds light on the economic and social ramifications of renewable energy mandates and ESG commitments, in both Arizona and beyond. States with high renewable energy mandates have incurred significantly higher electricity costs over the past decade compared to states without such mandates. And far from equally impacting all members of society these costs disproportionately burden those in the lowest income quintile.

The data underscores the potential consequences of ESG policies. The implementation of such policies significantly escalates the cost of energy, adversely affecting the very demographic group these policies claim to protect. Furthermore, the push for global net-zero emissions, though framed as an essential environmental goal, comes with an enormous price tag of \$9.2 trillion annually. This expense, if fully realized, represents a substantial economic waste, equivalent to half of corporate profits, a quarter of tax revenue, and a substantial portion of household spending.

In the specific case of Arizona, where renewable energy mandates and ESG goals are not yet an unavoidable outcome, the implications are far-reaching. REM is best thought of as a “tax” on Arizona homeowners and businesses that could double their monthly utility bills. Because the poor in Arizona pay more of their income in paying utility bills than the rich, the REM policies endorsed by environmentalists and many of the state’s utilities should be thought of as a highly regressive tax on Arizona’s families.

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