

Taking Tennessee Electric with a Private Vehicle Charging Market: An EV Infrastructure Policy for Conservative States

ABSTRACT

The transition from petroleum to electricity as a fuel source for vehicles is an essential step in the effort to stop harmful climate change. The transportation sector currently produces more carbon emissions in the United States than any other area. Recognizing this, the federal government and several states have recently devoted resources to facilitating the transition to large-scale electric vehicle (EV) use. In particular, there must be a nationwide network of EV charging infrastructure so that EV drivers can confidently drive EVs anywhere. Much of the legal research on increasing the number of EV charging facilities and consumer EV purchases focuses on states and areas where support of EVs is more likely, dismissing conservative-leaning Southeastern states, some Midwestern states, and rural areas as places where people “do not recognize climate change as a problem.” However, it is not enough to successfully prepare for and achieve mass EV adoption in liberal states. To sufficiently reduce US carbon emissions, the transition to EV use must be widespread across all states and regions, types of communities, and demographics. If environmentalists want to reduce emissions as much as possible in today’s polarized political environment, they must take a new approach to creating policy solutions. Instead of pushing large-scale, public EV projects across the board, policy makers should tailor state-level policy proposals that specifically appeal to conservative-leaning states. They should incorporate conservatives’ preferred instrument choices—namely, private businesses—as the drivers of EV infrastructure growth. While some environmentalists may prefer government-driven climate action, a privatized system of EV charging infrastructure will be more likely and more easily adopted by both governments and consumers in conservative states. In the context of climate change, decarbonizing the transportation sector as quickly as possible is more important than the policy tool used

to do it; therefore, choosing a politically feasible policy is the best strategy.

With this approach in mind, this Note proposes specific policies that enable and support the growth of privately owned charging station businesses within the Tennessee Valley Authority (TVA) region. Using Tennessee as a case study, this Note first explains how the TVA Act and state law would grant TVA a monopoly on the EV charging market in Tennessee. It then proposes changes to state and federal law that could remove the legal barriers to privately owned charging station businesses in the TVA region. Lastly, this Note argues that allowing a private EV charging market will increase conservative Tennessee's EV charging capabilities and encourage the purchase of EVs by Tennessee consumers.

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I. INTRODUCTION

Picture this: it's 2030, and you are an environmentally conscious resident of Illinois who has just purchased an EV. You finally felt ready to buy an EV now that your state has reliable charging stations for EVs and are excited to reduce your carbon footprint. You are taking your new vehicle on a road trip to visit your parents in eastern Tennessee, when you notice that your vehicle's battery is low. You are in a rural area, and you cannot locate a charging station for miles. You are stranded.

Now imagine it's 2030, and you are a longtime Tennessee resident. Your trusty pickup truck is finally on its last legs, and you cautiously eye the new electric trucks that just came out this year. You have noticed that the gas stations in your city are slowly being replaced by electric charging stations, and you do not want to be the last person stuck with a fuel-combustion engine and no place to fuel it. Not to mention, you wouldn't mind reducing your carbon emissions, or saving the money you spend on gas, since electricity is cheaper. But you are a staunch conservative, and you hesitate to support the large, federally owned TVA, which owns and operates EV charging stations, instead of the small businesses where you have fueled your pickup for a decade. You are concerned about the impact the transition to EVs will have on American jobs in the oil industry and about TVA's growing control over

Tennessee's transportation sector. Also, since Tennessee has lagged in investing in infrastructure, charging stations are still too few and far between not to worry about being stranded. The dilemmas of these drivers illustrate how insufficient charging infrastructure in some places could hinder the transition to EVs in the United States. To solve both of the above problems, this Note proposes that Congress and the Tennessee legislature amend the laws surrounding the sale of electricity to allow private entities to own and operate for-profit charging stations.

The transition to mass EV use in the United States is slowly but surely approaching. Although at the beginning of the decade EV sales made up only about 1.7 percent of all light-duty vehicle sales in the United States, sales have steadily increased in the last twenty years as the government and citizens have become more aware of the threat of climate change.¹ The transportation sector currently produces more carbon emissions in the United States than any other sector.² Even without decarbonizing the electric grid, EVs generate significantly lower carbon emissions than fossil fuel vehicles.³ As electricity generation is decarbonized, the reductions in carbon emissions from fleet electrification will approach 100 percent.⁴ Recognizing this, the federal government and several states have recently devoted resources

1. STACY C. DAVIS & ROBERT G. BOUNDY, TRANSPORTATION ENERGY DATA BOOK 182 (39th ed. 2021). For a definition of what constitutes a "light-duty vehicle," see *Vehicle Weight Classifications for the Emission Standards Reference Guide*, EPA, <https://www.epa.gov/emission-standards-reference-guide/vehicle-weight-classifications-emission-standards-reference> [<https://perma.cc/JLJ5-YYT8>] (Jan. 4, 2023). Generally, "light-duty vehicles" include passenger cars under 8,500 pounds, and some trucks. *US: Vehicle Definitions*, TRANSPORTPOLICY.NET, <https://www.transportpolicy.net/standard/us-vehicle-definitions/> [<https://perma.cc/Z3LS-5B6S>] (last visited Feb. 25, 2023).

2. *Sources of Greenhouse Gas Emissions*, EPA, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation> [<https://perma.cc/KJW9-852K>] (Aug. 5, 2022).

3. David Reichmuth, *Are Electric Vehicles Really Better for the Climate? Yes. Here's Why*, UNION OF CONCERNED SCIENTISTS: THE EQUATION (Feb. 11, 2020, 2:08 PM), <https://blog.ucsusa.org/dave-reichmuth/are-electric-vehicles-really-better-for-the-climate-yes-heres-why/> [<https://perma.cc/69EQ-MKLQ>]. The amount of total emissions that an EV produces depends on the carbon intensity of the sources used to generate electricity in a given region. According to recent data, due to rapid grid decarbonization in the past decade, production and use of EVs generates lower carbon emissions in every part of the country. In some regions, replacing a fossil fuel vehicle with an EV reduces carbon emissions by 4 to 7 percent. *See id.*

4. *NREL Study Identifies the Opportunities and Challenges of Achieving the U.S. Transformational Goal of 100% Clean Electricity by 2035*, OFF. OF ENERGY EFFICIENCY & RENEWABLE ENERGY (Aug. 30, 2022), <https://www.energy.gov/eere/articles/nrel-study-identifies-opportunities-and-challenges-achieving-us-transformational-goal#:~:text=Unlike%20other%20NREL%20studies%2C%20the,fuels%20production%2C%20higher%20reliance%20on> [<https://perma.cc/MV9V-KDCA>].

to facilitating the transition to large-scale EV use.⁵ At the most basic level, four things must happen to enable this transition.⁶

First, auto manufacturers should begin making EVs on a large scale, allowing EVs to replace traditional gasoline-powered vehicles eventually. Many manufacturers have already invested in EV technology and have announced aggressive goals for EV production.⁷ As of 2021, US auto manufacturers offered fifty light-duty EV models, and that number is expected to rise to 130 by 2023.⁸ Second, the electric grid and transmission lines across the United States should be bolstered to support the increased demand for electricity.⁹ Third, charging stations for EVs should be installed nationwide in sufficient quantities to make driving an EV possible in any part of the country. This goes hand in hand with the fourth step: getting retail, corporate, and government consumers to purchase EVs instead of gasoline-powered vehicles on a large scale. Some consumers will not purchase EVs until they are confident that access to charging stations is reasonably convenient and available wherever they choose to go.¹⁰ This Note focuses on achieving the third step.

Much research on increasing the number of EV charging facilities focuses on states where residents already support EVs, neglecting conservative-leaning states and localities as places where people “do not recognize climate change as a problem.”¹¹ However, to reduce carbon emissions sufficiently, the United States must

5. Juan Carlos Rodriguez, *Biden Sets Goal Of 50% Electric Vehicles By 2030*, LAW360 (Aug. 5, 2021), <https://plus.lexis.com/document/index?crd=3138def6-367a-4fda-8dd1-eb8156e05dde&pdpermalink=5cdce215-275f-4b66-8c40-ece9d4b05934&pdmfid=1530671&pdisurlapi=true> [https://perma.cc/7ANB-WXNZ]; Dave Simpson, *Nearly All Calif. Uber, Lyft Vehicles Must Be Electric By 2030*, LAW360 (May 20, 2021), <https://plus.lexis.com/document/index?crd=4f945fee-3072-4d97-a2e6-08e144f0703f&pdpermalink=5ba6018c-7265-46bc-aeb8-8d1dd966ac8b&pdmfid=1530671&pdisurlapi=true> [https://perma.cc/EC57-DU9X]; Clark Mindock, *NJ Greenlights \$166M Electric Car Charging Investment*, LAW360 (Jan. 27, 2021), <https://plus.lexis.com/document/index?crd=1503aa1c-7e39-4a28-9009-c188acc66029&pdpermalink=655f803e-7784-4fe8-9757-3dbce9021abe&pdmfid=1530671&pdisurlapi=true> [https://perma.cc/5Z6F-LYRY].

6. Michael P. Vandenberg & Jonathan M. Gilligan, *Forks in the Road*, 31 DUKE ENV'T L. & POL'Y FORUM 163, 167–170 (2020).

7. CLIMATE CENT., CLIMATE CENTRAL SOLUTIONS BRIEF: ELECTRIC VEHICLES 5–6 (2021).

8. *Id.* at 5.

9. See generally Avi Zevin, Sam Walsh, Justin Gundlach & Isabel Carey, *Building a New Grid Without New Legislation: A Path to Revitalizing Federal Transmission Authorities*, 48 ECOLOGY L.Q. 169 (2021).

10. JON A. KROSNICK & BO MACINNIS, CLIMATE INSIGHTS 2020: SURVEYING AMERICAN PUBLIC OPINION ON CLIMATE CHANGE AND THE ENVIRONMENT, REPORT: ELECTRIC VEHICLES 23 (2020).

11. Alexandra B. Klass, *Public Utilities and Transportation Electrification*, 104 IOWA L. REV. 545, 586 (2019).

accomplish a transition to EV use across all states, regions, and demographics.¹² To this end, private sector uptake of EVs may be able to bypass the solution aversion that is one cause of conservative rejection of climate change mitigation.¹³ The recent popularity of the electric version of the Ford F-150 pickup truck, which targets a conservative customer base,¹⁴ following Ford's \$5.6 billion investment in a new EV and battery plant near Memphis, is one example.¹⁵ Meanwhile, as charging stations appear across the country, state legislatures and regulatory bodies must answer the question of who can own and profit from charging stations: utilities, private businesses, or both?¹⁶ This Note also addresses the question of who should be authorized to sell electricity through charging stations in majority-conservative states, particularly those within the authority of the TVA.

While a private EV charging industry would likely have both benefits and drawbacks, other scholarship has already explored these in detail.¹⁷ Thus doing so here would largely rehash the political debate on the choice between a public versus private energy sector in general. This Note seeks to move beyond the discussion of policy instrument choice in the abstract and instead argues that a private EV charging network is the best solution for a specific area: the largely conservative

12. See *Fact Sheet: President Biden Announces Steps to Drive American Leadership Forward on Clean Cars and Trucks*, WHITE HOUSE (Aug. 5, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/08/05/fact-sheet-president-biden-announces-steps-to-drive-american-leadership-forward-on-clean-cars-and-trucks/> [<https://perma.cc/F93T-3CYC>].

13. Ash Gillis, Michael Vandenberg, Kaitlin Raimi, Alex Maki & Ken Wallston, *Convincing Conservatives: Private Sector Action Can Bolster Support for Climate Change Mitigation in the United States*, 73 ENERGY RSCH. & SOC. SCI. 101947 (2021).

14. See Tyler Duffy, *Ford's Electric F-150 Lightning Is Shaping up to Be Insanely Successful*, GEAR PATROL (Jan. 4, 2022), <https://www.gearpatrol.com/cars/a38663964/ford-f-150-lightning-production/> [<https://perma.cc/DP45-FB3E>]; Linda Carroll, *Ford's Electric Pickup Is Powerful Enough to Appeal Even to Republican Truck Drivers*, OBSERVER (May 10, 2022, 3:24 PM), <https://observer.com/2022/05/fords-electric-pickup-is-powerful-enough-to-appeal-even-to-republican-truck-drivers/> [<https://perma.cc/N57E-ZRXB>].

15. Daniel Connolly, *Ford Aims to Create 5,700 Jobs with New Factory, Battery Plant Near Memphis*, MEMPHIS COM. APPEAL, <https://www.commercialappeal.com/story/money/business/development/2021/09/27/ford-electric-vehicles-memphis-regional-megasite-new-jobs/5884664001/> [<https://perma.cc/6KDJ-RE5P>] (Sept. 27, 2021, 6:41 PM).

16. See *EV Charging Networks*, U.S. DEPT OF TRANSP., <https://www.transportation.gov/rural/ev/toolkit/ev-partnership-opportunities/charging-networks> [<https://perma.cc/Q9ED-UVC7>] (June 16, 2022).

17. See generally, e.g., Brandon Hofmeister, *Electric Vehicle Charging Infrastructure: Navigating Choices Regarding Regulation, Subsidy, and Competition in a Complex Regulatory Environment*, 5 GEO. WASH. J. ENV'T. & ENERGY L. 42 (2014).

TVA region.¹⁸ This Note further focuses on how enabling private EV charging businesses would support the EV transition, specifically in conservative states, where charging infrastructure is currently the most lacking.¹⁹ This Note focuses on Tennessee as a case study, but the strategy it proposes applies to other states and areas within TVA's jurisdiction. Finally, this Note aims to focus on an often ignored but crucial factor that makes growing EV infrastructure through enabling private businesses a better choice than other approaches in this particular region. Simply put, given the political makeup of Tennessee and similar states, a privatized approach to building an EV charging station network is more likely to happen.²⁰

As federal and state law stand, the TVA is the only entity that could practically own and operate for-profit charging stations in Tennessee.²¹ Allowing public charging stations to dominate the initial investment in EV charging infrastructure has worked well in states where EVs are already prevalent, and many scholars and policy makers favor this solution.²² However, this Note argues that the political and ideological realities of states like Tennessee make private businesses integral to the development of EV charging infrastructure. Therefore, this Note proposes that Congress and the Tennessee state legislature amend federal and Tennessee state law to allow private entities to own and operate for-profit charging stations. These changes would gain conservative support and accelerate the development of EV charging infrastructure in Tennessee, which is all-important in developing policies with the ultimate goal of reducing carbon emissions and mitigating the effects of climate change.²³

Part II of this Note reviews the status of EV infrastructure development in various states and the different ways that states with robust EV charging infrastructure have addressed relevant legal questions. This Part also provides an overview of how the sale of electricity works within TVA's region, discussing both the legal regime and practical impacts. Part III first explains how the current legal

18. See *infra* Section IV.A.

19. See *infra* Section III.C.

20. See *infra* Sections III.B.2, III.C.

21. See *infra* Section III.A. Note that this Note uses the term “public” to describe entities and operations, including EV charging stations, which are owned and run by a government, as opposed to those owned and run by private individuals or organizations. Some published materials, including some legislative and regulatory materials, describe charging equipment that is available to the public, regardless of who owns it or profits from it, as “public” in order to distinguish it from charging equipment located in private residences.

22. See *generally* Klass, *supra* note 11.

23. See *infra* Section III.C.

regime within the TVA region prevents private businesses from owning and operating EV charging stations for profit. It then argues that focusing on public entities like TVA as the primary mechanisms for EV charging services, as current proposals largely do, hinders the growth of EV charging infrastructure in conservative states, because such publicly driven solutions are less politically feasible in these states. Finally, Part III argues that prioritizing politically feasible solutions is an underused but important strategy in policy decision-making, especially in addressing climate change. Part IV outlines a proposal for enabling and fostering a private EV charging industry in Tennessee, arguing that this strategy would support the transition to EV usage in Tennessee and similar states.

II. BACKGROUND

A. Progress of EV Infrastructure Development in the United States

The United States is only just beginning to transition to the use of EV technology on a large scale. At the national level, EV sales make up only about 1.7 percent of all light-duty vehicle sales, although sales have steadily increased in the last twenty years.²⁴ This number is likely to increase with growing investment in charging infrastructure to support mass EV use.²⁵ There are roughly fifty thousand publicly available charging stations in the United States, and the recently passed Inflation Reduction Act aims to fund many more by allocating tax credits for states, utilities, and businesses to invest in EV charging stations.²⁶ The Biden Administration has declared reducing emissions to combat the climate crisis a priority of the federal government,

24. See DAVIS & BOUNDY, *supra* note 1, at 182. This statistic refers to all-EVs; hybrid vehicles and plug-in hybrid vehicles account for another 3.2 percent. *Id.*

25. Michael Woodward, Bryn Walton, Jamie Hamilton, Genevieve Alberts, Saskia Fullerton-Smith, Edward Day & James Ringrow, *Electric Vehicles: Setting a Course for 2030*, DELOITTE (July 28, 2020), <https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/electric-vehicle-trends-2030.html> [https://perma.cc/U4X8-DGDV].

26. *Alternative Fueling Station Counts by State*, U.S. DEP'T OF ENERGY, <https://afdc.energy.gov/stations/states> [https://perma.cc/P38W-D3TK] (Feb. 25, 2023); see also Rodriguez, *supra* note 5; Coral Davenport & Christopher Flavelle, *Infrastructure Bill Makes First Major U.S. Investment in Climate Resilience*, N.Y. TIMES, <https://www.nytimes.com/2021/11/06/climate/infrastructure-bill-climate.html?action=click&module=RelatedLinks&pgtype=Article> [https://perma.cc/LW3Y-8DKZ] (Nov. 10, 2021); Inflation Reduction Act of 2022, Pub. L. No. 117-169, § 13501, 136 Stat. 1818, 1969 (2022); *Inflation Reduction Act Impact on Electric Vehicles*, ELECTRIFICATION COAL., [https://perma.cc/5SRR-KESY] (last visited Feb. 25, 2023). For a summary of the Inflation Reduction Act's provisions supporting electrification, see generally SENATE DEMOCRATIC CAUCUS, SUMMARY OF THE ENERGY SECURITY AND CLIMATE CHANGE INVESTMENTS IN THE INFLATION REDUCTION ACT OF 2022 (2022).

including electrification of the transportation sector.²⁷ The Administration also aims to “lead by example” in transportation decarbonization; it plans to transition from using fossil fuel vehicles to “clean and zero-emission vehicles for Federal, State, local, and Tribal government fleets, including vehicles of the United States Postal Service.”²⁸

Progress on the state level, meanwhile, is encouraging but uneven. Along with the federal government, traditionally liberal states have demonstrated commitment to the transition toward EVs by investing in charging infrastructure.²⁹ California leads the nation in EV charging station locations with 13,314 stations.³⁰ Both New York and California have committed to “phasing out” the sale of fuel-combustion engines by 2035 and have thus committed to more state investment in EV charging technology.³¹

Meanwhile, other states fall behind in preparing for the imminent move from fuel combustion to EVs.³² Traditionally conservative states have made comparatively little progress in both charging station installation and consumer EV uptake.³³ These states, on the whole, have significantly fewer charging stations by land area and population.³⁴ Using presidential votes from 2016 and 2021 as a proxy for categorizing states as “conservative” or “liberal,” 84 percent of conservative states have a below-average number of charging stations per resident,³⁵ and 73 percent have a below-median number of charging stations per resident.³⁶ By land area, 96 percent of conservative states have a below-average number of charging stations per square mile (adjusted for outliers—Alaska, Rhode Island, and Massachusetts are excluded from the average).³⁷ Seventy-three percent have a below-median number of charging stations per square mile.³⁸ The distinction is even clearer when comparing rural to urban areas in these

27. Exec. Order No. 14,008, 86 Fed. Reg. 19 § 101 (Jan. 27, 2021).

28. *Id.* § 205.

29. *Alternative Fueling Station Counts by State*, *supra* note 26.

30. *Id.*

31. Lora Kolodny, *New York Law Phases Out Most Gas-Powered Vehicles by 2035*, CNBC (Sept. 9, 2021, 7:07 PM), <https://www.cnbc.com/2021/09/09/new-york-law-phases-out-most-gas-powered-vehicles-by-2035.html> [<https://perma.cc/L9TX-TVJE>].

32. *Alternative Fueling Station Counts by State*, *supra* note 26.

33. *Id.*

34. *Id.*

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.*

states.³⁹ Also, fewer conservative states have committed to goals for overall decarbonization or percent EV usage.⁴⁰

B. Ownership and Regulation of EV Charging Stations: State Approaches

The question of whether EV charging should be a matter of public utility or the private sector has sparked debate alongside the growth of EV use.⁴¹ States that have invested significantly in EV charging infrastructure have had to make important and hotly contested decisions.⁴² These include whether government-owned electricity providers and distributors, non-power company private sellers, or both should be allowed to own and operate charging stations and whether non-power company private sellers should be regulated as utilities.⁴³

The issue of whether private sellers should be regulated as utilities arises because some states' statutory definitions of "utilities" would include private parties who own EV charging technology and profit from selling electricity and use of charging equipment.⁴⁴ However, if a state treated private owners and operators of EV charging stations as utilities, it would create barriers to private participation in the industry.⁴⁵ Private parties would have to comply with strict utility regulations, and, in many cases, they would be subject to limits on the rates they can charge, which would inhibit market competition between sellers.⁴⁶ To remove these regulatory barriers, several states that allow non-power companies to sell EV charging technology have exempted such companies from the definition of utilities.⁴⁷

The question of who may own, operate, and profit from EV charging technology in a state depends somewhat on how the sale and

39. *Id.*; *TransAtlas*, U.S. DEPT OF ENERGY, <https://afdc.energy.gov/transatlas/> [https://perma.cc/XY83-QPWA] (last visited Feb. 25, 2023).

40. *Table of 100% Clean Energy States*, CLEAN ENERGY STATES ALL., <https://www.cesa.org/projects/100-clean-energy-collaborative/guide/table-of-100-clean-energy-states/> [https://perma.cc/PW8X-CKGZ] (last visited Feb. 25, 2023); *State Climate Policy Maps*, CTR. FOR CLIMATE & ENERGY SOLS., <https://perma.cc/Y94C-QMK6> [https://perma.cc/Y94C-QMK6] (last visited Feb. 25, 2023).

41. *See* Klass, *supra* note 11, at 593.

42. *Id.* at 547–48.

43. *Id.*

44. *Id.* at 597, 611–12.

45. *Id.* at 611–12.

46. *Id.* at 567.

47. *Id.* at 597.

distribution of electric power normally operates in that state.⁴⁸ In general, regional utility companies, or “providers,” purchase electricity from generators or generate it themselves.⁴⁹ Who these providers are and who controls them varies by state and region. Most regions fall into one of two general categories: regulated and deregulated regions. In a deregulated region, providers are private, for-profit power companies that compete with each other for consumer business and are controlled by stockholders.⁵⁰ In most regulated regions, a provider is a public utility that is funded by taxpayers and does not generate profit from electric power sales.⁵¹ These public utility providers have a monopoly on the sale of power within their jurisdictions and are controlled by a public utility commission.⁵² In another type of regulated region, a federally owned corporation acts as the power provider.⁵³ TVA, one such federal corporation, provides power to a large area of the Southeast, encompassing all of Tennessee and large parts of surrounding states.⁵⁴ The boundary surrounding this region is often referred to as the “TVA Fence.”⁵⁵ Although these corporations function largely as government agencies do, they are technically for-profit corporations.⁵⁶ In particular, TVA does not depend on government appropriations to function; profits from the sale of electricity support the entire entity.⁵⁷

Whether a region is regulated or deregulated also determines who owns power transmission lines in the region and who is able to sell

48. See, e.g., *Electricity Explained: How Electricity Is Delivered to Consumers*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php> [<https://perma.cc/GZ63-S8WJ>] (Aug. 11, 2022) [hereinafter *Electricity Explained*]; *Regulated vs. Deregulated Electricity Markets*, WATCHWIRE (Jan. 9, 2018), <https://watchwire.ai/r/egulated-vs-deregulated-electricity-markets/> [<https://perma.cc/JTA4-VFQ5>] [hereinafter *Regulated vs. Deregulated*]; *Understanding Electricity Market Frameworks & Policies*, EPA, <https://www.epa.gov/greenpower/understanding-electricity-market-frameworks-policies> [<https://perma.cc/QY6A-U9S5>] (Aug. 26, 2022).

49. See *Electricity Explained*, *supra* note 48.

50. See *id.*; *Regulated vs. Deregulated*, *supra* note 48.

51. See *Electricity Explained*, *supra* note 48; *Regulated vs. Deregulated*, *supra* note 48.

52. See *Electricity Explained*, *supra* note 48; *Regulated vs. Deregulated*, *supra* note 48.

53. See *Electricity Explained*, *supra* note 48; *TVA at a Glance*, TENN. VALLEY AUTH., <https://www.tva.com/about-tva/tva-at-a-glance> [<https://perma.cc/7QQA-BWR9>] (last visited Mar. 6, 2023).

54. See *Electricity Explained*, *supra* note 48; *TVA at a Glance*, *supra* note 53.

55. See *TVA Heritage Series: The Great Compromise*, TENN. VALLEY AUTH., <https://www.tva.com/about-tva/our-history/tva-heritage/the-great-compromise> [<https://perma.cc/59KK-UKLZ>] (last visited Mar. 6, 2023).

56. See *Tennessee Valley Authority*, FED. REG., <https://www.federalregister.gov/agencies/tennessee-valley-authority> [<https://perma.cc/6DZH-KUZR>] (last visited Feb. 25, 2023); *TVA at a Glance*, *supra* note 53.

57. See *Public Power for the Valley*, TENN. VALLEY AUTH., <https://www.tva.com/energy/public-power-partnerships> [<https://perma.cc/L3ZU-3966>] (last visited Mar. 6, 2023).

power there.⁵⁸ In deregulated regions, where privately owned power providers vie for consumer business, competing companies purchase and own power transmission lines located in the area, although public entities typically maintain the lines.⁵⁹ Since more than one company owns transmission lines that can transmit power to a given area, consumers in the area have multiple power provider options to purchase from.⁶⁰ In regulated regions, where only one entity—a state or local public provider or a federally owned corporation—acts as the primary power provider, that entity owns all power transmission lines in its area of authority.⁶¹

Regardless of who the electric power provider or providers are in a given region, local utility companies owned by the county or municipality, commonly known as Local Power Companies (LPCs), distribute power to consumers in their localities.⁶² While consumers typically pay electric bills directly to LPCs, LPCs are nonprofit entities and only gain a distribution charge from these sales.⁶³ Only the provider, whether a private entity or federally owned corporation, actually collects profits from the sale of electric power to consumers.⁶⁴

C. TVA Structure and Regulatory Scheme

TVA, a regional power provider, is a federally owned corporation.⁶⁵ It is less regulated and therefore less accountable to the LPCs and consumers that it serves as compared to other types of providers.⁶⁶ Private provider corporations are regulated by the votes of shareholders and, more importantly, by competition with other private providers.⁶⁷ Private providers' actions are kept in check by the ability of

58. See *Understanding Electricity Market Frameworks & Policies*, *supra* note 48.

59. See *Regulated vs. Deregulated*, *supra* note 48.

60. *Id.*

61. *Id.*

62. See *Electricity Explained*, *supra* note 48.

63. *Id.*; *Understanding the TVA Model*, POWER CONSULTING ASSOCS. (Dec. 27, 2017), <https://www.powerconsultingassociates.com/understanding-the-tva-model> [<https://perma.cc/P2JL-7K6L>].

64. See *Electricity Explained*, *supra* note 48.

65. See Maggie Shober, *FERC Complaint Filed Against TVA Could Allow Customers Access to Cheaper, Cleaner Power*, S. ALL. FOR CLEAN ENERGY (Jan. 15, 2021), <https://cleanenergy.org/blog/ferc-complaint-filed-against-tva-could-allow-customers-access-to-cheaper-cleaner-power/> [<https://perma.cc/AP65-H29D>].

66. See Stephen Smith, *TVA Mistruths Highlight Need for More Oversight over Unregulated Monopoly Power Company*, S. ALL. FOR CLEAN ENERGY (May 14, 2021), <https://cleanenergy.org/blog/tva-mistruths-highlight-need-for-more-oversight-over-unregulated-monopoly-power-company/> [<https://perma.cc/F4BG-8ZRH>].

67. *Id.*

consumers to choose another provider if their current provider does not respond to their desires or charges more than they are willing to pay.⁶⁸ Other utilities that have monopolies—or near-monopolies over a certain region, as TVA does—are publicly owned utilities regulated by state and local public utility commissions.⁶⁹ Since TVA is federally owned, it is not subject to the authority of state and local regulatory bodies.⁷⁰ However, as a corporation, it is more independent from the federal government than many other federal agencies; it does not depend on federal appropriations and selects its own managing officers, although the President appoints the board of directors with Senate approval.⁷¹ TVA is also exempt from general regulations issued by the Federal Energy Regulatory Commission (FERC), although it is subject to regulations directed to it specifically.⁷² In short, TVA’s federal corporation status means that it is mostly self-regulating.⁷³

TVA, like other monopoly providers in “regulated” regions, owns the power transmission lines within its area of authority.⁷⁴ A set of FERC regulations known collectively as the “open access rule” require public utility companies in regulated regions to allow other providers to use their transmission lines for a universal set fee.⁷⁵ However, as the FERC stated in response to comments on the regulations, the open access rule only applies to local and state public providers; therefore, the rule does not require TVA to allow other providers access to its power lines.⁷⁶ As a federal entity, it is also not subject to the authority of a local or state utility commission that can require it to allow power line access.⁷⁷ In practice, without a mechanism requiring TVA to allow outside access to transmission lines, TVA is the only provider available to consumers within its region of authority.⁷⁸

68. See *Regulated vs. Deregulated*, *supra* note 48.

69. See Smith, *supra* note 66.

70. *Id.*

71. *Id.*; *TVA at a Glance*, *supra* note 53; 16 U.S.C. §§ 831a(a)(1)–(2), (h)(1); 831b(a).

72. See MONICA GREER, *ELECTRICITY MARGINAL COST PRICING* 47 (2012).

73. See Smith, *supra* note 66.

74. See *Regulated vs. Deregulated*, *supra* note 48.

75. 18 C.F.R. § 35.28(c)(1) (2022).

76. ROBERT P. MURPHY, U.S. GEN. ACCT. OFF., GAO-96-13, *PROMOTING WHOLESALE COMPETITION THROUGH OPEN ACCESS NON-DISCRIMINATORY TRANSMISSION SERVICES BY PUBLIC UTILITIES; RECOVERY OF STRANDED COSTS BY PUBLIC UTILITIES AND TRANSMITTING UTILITIES* (1996).

77. See GREER, *supra* note 72, at 48.

78. See James Bruggers, *TVA’s Push for Lengthy Utility Deals Could Set Back Green Initiatives in Tennessee Cities*, KNOXNEWS (Jan. 8, 2020, 5:00 AM), <https://www.knoxnews.com/story/news/local/tennessee/2020/01/08/tva-trying-lock-tennessee-cities-into-lengthy-utility-deals/2698982001/> [<https://perma.cc/NV9F-EXQS>].

On behalf of consumers in TVA's region, county and municipal LPCs agree to purchase power from TVA for a certain price by signing power purchase agreements (PPAs).⁷⁹ These agreements typically bind local power companies to purchase all of their electric power from TVA at a certain rate.⁸⁰ TVA claims that its monopoly on the sale and transmission of electricity in the region keeps these rates, and thus consumers' electricity bills, low.⁸¹ However, TVA's monopoly status also means that county and municipal LPCs within TVA's region have almost no real bargaining power in agreements with TVA, since they have no alternative provider options from whom to purchase power.⁸² In drafting PPAs, local power companies have no power to negotiate for lower rates, the use of generating sources that reduce carbon emissions, or the opportunity to purchase some of their power from other sources.⁸³ TVA's monopoly on the sale of electricity forces LPCs to purchase power from TVA at any rate, under any terms, subject to little regulatory oversight.⁸⁴ This issue has become of more concern recently, as several municipalities have complained that TVA has used this monopoly to bind them to PPAs with unfair rates and terms.⁸⁵

In addition to TVA's monopoly and control of the purchase of electricity, it also has control over any for-profit resale of electric power in its jurisdiction.⁸⁶ Private parties planning to resell power for profit can only purchase surplus power—electricity not sold to LPCs or to large businesses or plants that purchase power directly from TVA—and TVA is not required to sell it to them.⁸⁷ TVA can instead choose to sell its surplus power back to generators or other power providers.⁸⁸ TVA also sets the price that resellers are permitted to charge.⁸⁹

79. *Id.*

80. See Patrice Cole, *TVA's Resistance to Net Metering Creates an Obstacle to Household Solar Power*, KNOXVILLE MERCURY (Mar. 15, 2017), <https://www.knoxmercury.com/2017/03/15/tvas-resistance-net-metering-creates-obstacle-household-solar-power/> [<https://perma.cc/7GUN-QTQM>].

81. See *Public Power for the Valley*, *supra* note 57.

82. See Smith, *supra* note 66.

83. See Bruggers, *supra* note 78.

84. See Cole, *supra* note 80.

85. See Bruggers, *supra* note 78.

86. 16 U.S.C. § 831i.

87. *Id.*

88. *Id.*

89. *Id.*

III. ANALYSIS

A. Obstacles to Private EV Charging Stations Under TVA Authority

Under the current regulatory regime, TVA is functionally the only entity that can profit from the sale of electricity within the TVA Fence, including at EV charging stations.⁹⁰ Private parties likely could not own, operate, and profit from EV charging stations in TVA's region, as the law described in the previous Section stands.⁹¹ The current system for the sale and distribution of power bars private EV stations from both access to electricity and distribution in several ways.⁹²

1. TVA Would Control Access to Affordable Electricity Supply.

First, private EV charging stations could not practically and consistently purchase electricity from TVA.⁹³ While private parties can in theory buy electricity from TVA to resell for profit, according to TVA's authorizing statute, TVA controls the purchase of power for resale so completely that it would be unreliable, unprofitable, and thus essentially impossible in practice.⁹⁴ For-profit businesses can only buy surplus electricity, and only at TVA's discretion.⁹⁵ Private charging stations would not be able to get power from TVA absent a surplus or TVA selling the surplus back to generators or other power providers, so private charging stations would be competing with these entities to purchase the electricity to supply EV charging customers.⁹⁶ In particular, if TVA took advantage of the rise of EV use by opening its own charging stations, it would have an incentive to actively make it impossible for private EV charging stations to purchase electricity for resale.⁹⁷ TVA could decide not to supply any surplus power to privately owned charging stations to corner the market on EV charging in its region.

Secondly, TVA's nature as a federal corporation with a monopoly over providing and transmitting electricity within its area of authority also makes it essentially impossible for private EV charging stations to

90. *See id.*

91. *See id.*

92. *See id.*

93. *See id.*

94. *Id.*

95. 16 U.S.C. § 831(k).

96. *Id.*

97. *See* § 831(k).

resell electricity to consumers for a profit.⁹⁸ Even if electric power were consistently available for resale purchase from TVA, private owners of EV charging stations probably could not purchase electricity from TVA at prices that would allow them to profit from an EV charging business.⁹⁹ TVA would likely use its unrestricted control of transmission power lines in its region to block for-profit charging stations from purchasing power from other providers, just as it does with LPCs.¹⁰⁰ Because of TVA's unique position as a federally regulated corporation, no FERC regulations or regional public utility commissions can require it to allow access.¹⁰¹ Like LPCs, private owners and operators of for-profit EV charging stations would have no bargaining power in negotiating the price of purchasing electricity from TVA, since they cannot receive power from another provider through power lines in TVA's jurisdiction.¹⁰² Without competition from other providers, TVA would have no incentive to sell electricity to EV charging stations at a price that would allow for profitable resale, especially because TVA is mostly self-governing and is subject to little external oversight.¹⁰³ It could instead easily maximize its own profits by charging a premium for electricity resale at the expense of EV charging business owners. LPC complaints of unfairly one-sided PPAs foreshadow this outcome.

2. Electricity Resale Rates Set by TVA Would Preclude Meaningful Competition Between EV Charging Businesses.

Furthermore, under Section 12 of its authorizing statute, TVA sets and enforces the uniform rates that private resellers in its jurisdiction can charge for electricity.¹⁰⁴ Therefore, there would be no opportunity for meaningful competition between private EV charging station owners and operators because private charging stations could not attract consumers by charging lower rates.¹⁰⁵ The potential to increase profits by creating, through innovation or negotiation, a way to lower prices and attract more customers is a major driving factor for investment in businesses.¹⁰⁶ It is unlikely that private parties will

98. *Id.*

99. *See id.*

100. Bruggers, *supra* note 78.

101. Athens Utils. Bd., 177 FERC ¶ 61,021 (2021).

102. *Id.*

103. *Governance*, TENN. VALLEY AUTH., <https://www.tva.com/about-tva/our-leadership/board-of-directors/governance> [<https://perma.cc/PMA7-SGDC>] (last visited Mar. 6, 2023) (stating that TVA is governed by its own bylaws and board); *see also* Bruggers, *supra* note 78.

104. § 831(k).

105. *Id.*

106. *See id.*

invest in EV charging station businesses if they are unable to increase profits by outperforming their competitors in the marketplace, given that strategically changing prices is an important way of gaining a competitive market advantage.¹⁰⁷

Since TVA unilaterally sets the price for its sale of electricity to power companies and all electricity resale to consumers,¹⁰⁸ TVA could easily destroy private EV charging by establishing its own for-profit EV charging stations. TVA could charge consumers substantially less for EV charging services than private charging stations, since its control of transmission lines allows TVA, and TVA alone, to buy power wholesale from generators.¹⁰⁹ Meanwhile, it could sell electricity to private EV charging stations at a premium, and also set prices for private resale of electricity for EV charging at rates too low to be profitable.¹¹⁰ The current regulatory regime makes profitable privately owned and operated EV charging stations impossible because it allows TVA to undercut the prices of private competitors significantly by completely controlling the rates for sale and resale.

3. Interpretation of TVA Fence Precludes Private Charging Station Businesses.

TVA also interprets its authorizing statute, the Tennessee Valley Authority Act (TVA Act), to mean that no other entities are permitted to profit from the sale of power within its region.¹¹¹ TVA has stated this interpretation of section 15(a) of the TVA Act in recent situations where its monopoly on the energy market has been questioned; for example, it cited this interpretation to justify its refusal to allow users of solar energy to resell unused energy back to the grid and to argue that LPCs in its region cannot seek alternative providers, as many have threatened to do if purchase power agreements continue to be one-sided.¹¹² TVA will likely maintain this position as EV charging infrastructure develops in TVA's region as a potential source of revenue and TVA is faced with the threat of private businesses competing with it for EV charging business. It could be years before the issue is settled by litigation, by which time the existing infrastructure and EV charging sellers will be already established and private businesses may not be

107. *See id.*

108. *Id.*

109. *Id.*

110. *Id.*

111. Cole, *supra* note 80.

112. Shober, *supra* note 65.

able to catch up to this early advantage.¹¹³ Furthermore, courts would likely defer to TVA's interpretation of the laws regulating it, blocking private businesses from selling EV charging to consumers for profit.¹¹⁴

Given TVA's insistence on maintaining its status as the sole seller of electricity in Tennessee, TVA would also likely attempt to enforce PPAs against local governments under contract law to bar them from charging government vehicles at privately owned charging stations.¹¹⁵ Government fleets represent a significant portion of vehicles on the road, and state and local governments may be among the first users to transition to EVs if the federal government's commitments are any indication.¹¹⁶ This would guarantee a significant amount of business for TVA from the outset, giving TVA an advantage over private EV charging businesses.¹¹⁷ If TVA is able to establish itself as the only for-profit seller in its area of authority—either in court or indirectly by chilling private investment—it will at least initially make private, for-profit EV charging stations legally impossible in its region. However, TVA's monopoly on power sales and its self-regulating nature makes such private charging stations practically impossible, regardless of whether they are legally possible.

4. Tennessee State Law Could Subject Charging Stations to Utility Regulations.

Title 65 of the Tennessee state code defines a “public utility” as

every individual . . . [or] corporation . . . that own[s], operate[s], manage[s] or control[s] . . . electric light . . . [or] power . . . affected by and dedicated to the public use . . . under privileges, franchises, licenses, or agreements, granted by the state . . . [that is] doing business for profit.¹¹⁸

It is not clear that this definition would apply to privately owned charging stations, depending on how the phrases “public use” and

113. *Id.*

114. *See generally* *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984) (establishing “*Chevron* deference” to an agency’s interpretation of its statute). The TVA is entitled to *Chevron* deference. *See United States ex. rel. Tenn. Valley Auth. v. Millsaps*, 687 F. Supp. 220 (W.D.N.C. 1988); *Ala. Power Co. v. Tenn. Valley Auth.*, 948 F. Supp. 1010 (N.D. Ala. 1996). While not all of these cases apply *Chevron*, both courts assume that TVA is an agency ordinarily entitled to *Chevron* deference.

115. *See* Bruggers, *supra* note 78.

116. Matthew Thibault, *All-Electric Ford F-150 Lightning Sparks Interest as Electric Vehicles Make Waves*, CONSTR.DIVE (Nov. 19, 2021), <https://www.constructiondive.com/news/all-electric-ford-f-150-lightning-sparks-interest-as-electric-vehicles-make/610347/> [<https://perma.cc/FZ54-37MR>].

117. *See* Bruggers, *supra* note 78.

118. TENN. CODE ANN. § 65-4-101(6) (2022).

“privileges . . . granted by the state” would be interpreted by a court.¹¹⁹ However, even this ambiguity would likely chill private investment in charging station businesses since potential investors would be uncertain about whether EV charging stations would have to comply with the strict regulations that apply to utilities.¹²⁰

B. Current Approaches to EV Charging Policy Development and Their Inadequacy in Conservative States.

1. Public Utilities at the Forefront of Investment in EV Charging Infrastructure

In policy proposals for expanding EV charging infrastructure, many legal scholars and policy makers have envisioned public entities as the driving forces for creating charging infrastructure to support the transition to EVs.¹²¹ These proposals stress that the urgency of reducing carbon emissions by electrifying transportation compels public officials to act now, rather than waiting for private parties to begin investing in and growing the EV charging market.¹²² Proponents of publicly owned EV charging stations argue that the benefits of reducing emissions by supporting EVs will far outweigh the cost to taxpayers of subsidizing charging infrastructure.¹²³ Scholars also predict that allowing local or regional public providers to dominate the EV charging business will lead to lower costs for consumers who drive EVs—an argument similar to TVA’s justification for its monopoly on electricity sales.¹²⁴ Proponents of this strategy argue that publicly run stations will be more reliable and better able to obtain—and therefore sell—electricity at the lowest costs.¹²⁵ This mirrors a general tendency of climate policy proposals to focus heavily on large-scale legislative solutions.¹²⁶

119. *Id.*

120. Klass, *supra* note 11, at 567.

121. *See, e.g., id.*; Zevin et al., *supra* note 9, at 7; Ronald E. Minsk, Sam P. Ori & Sabrina Howell, *Plugging Cars into the Grid: Why the Government Should Make a Choice*, 30 ENERGY L. J. 317, 364–65, 375–76 (2009) (focusing on the government and public utilities as the primary drivers of charging infrastructure development); William Boyd, *Public Utility and the Low-Carbon Future*, 61 UCLA L. REV. 1614, 1619 (2014).

122. Klass, *supra* note 11, at 582, 594, 598; *see also* Zevin et al., *supra* note 9, at 6, 10.

123. Klass, *supra* note 11, at 572, 592–93; *see also* Boyd, *supra* note 121, at 1679–82.

124. Klass, *supra* note 11, at 572–74; *Public Power for the Valley*, *supra* note 57.

125. *See* Klass, *supra* note 11, at 593–94; Boyd, *supra* note 121, at 1685, 1687.

126. *See generally* Reuven S. Avi-Yonah & David M. Uhlmann, *Combating Global Climate Change: Why a Carbon Tax Is a Better Response to Global Warming than Cap and Trade*, 28 STAN. ENV’T L. J. 3 (2009); Justin Gundlach, *To Negotiate a Carbon Tax: A Rough Map of Interactions, Tradeoffs, and Risks*, 43 COLUM. J. ENV’T L. 269 (2019); JONATHAN L. RAMSEUR & JANE A.

While some policy developers and government officials consider privately owned charging facilities in their proposals, many do not see them as a primary mechanism for developing charging infrastructure.¹²⁷ Policy makers still contemplate government action as the initial force behind expanding EV infrastructure and are simply concerned with protecting the potential of a private EV charging market to develop by limiting public utilities' control.¹²⁸ Because scholars often tend to favor public mechanisms to create this necessary infrastructure,¹²⁹ most have not identified TVA's control over the sale of electricity as a major obstacle to EV charging infrastructure; they would see no problem with the fact that only TVA could own and operate for-profit charging stations within the TVA Fence.

a. Proposals for Federal EV Infrastructure Plans Favor Public Utilities as Drivers

Some policy plans for electrifying the transportation sector have focused on the need for federal legislative action on the installation of EV infrastructure to enable the transition to EVs and achieve drastic emissions reductions.¹³⁰ For example, the Climate Leadership and Environmental Action For Our Nation's Future Act (CLEAN Future Act), the "most expansive climate legislation" attempted by House Democrats to date, allocated almost \$50 billion to the development of EV charging infrastructure.¹³¹ A single-minded focus on these strategies, however, ignores the extreme difficulty of enacting them, as demonstrated by the CLEAN Future Act's failure in Congress.¹³² Partisanship in the United States and the related gridlock in Congress

LEGGETT, CONG. RSCH. SERV., R45625, ATTACHING A PRICE TO GREENHOUSE GAS EMISSIONS WITH A CARBON TAX OR EMISSIONS FEE: CONSIDERATIONS AND POTENTIAL IMPACTS (2019).

127. See Klass, *supra* note 11, at 550, 584, 587.

128. See *id.* at 550, 587; MASS. DEPT OF PUB. UTILS., D.P.U. 13-182-A, ORDER ON DEPARTMENT JURISDICTION OVER ELECTRIC VEHICLES, THE ROLE OF DISTRIBUTION COMPANIES IN ELECTRIC VEHICLE CHARGING AND OTHER MATTERS (2014).

129. See generally Klass, *supra* note 11; Jonathan M. Gilligan & Michael P. Vandenbergh, *Accounting for Political Feasibility in Climate Instrument Choice*, 32 VA. ENV'T L.J. 1 (2014) [hereinafter Gilligan & Vandenbergh, *Accounting for Political Feasibility*].

130. Gilligan & Vandenbergh, *Accounting for Political Feasibility*, *supra* note 129.

131. Hilary Jochmans, *Democrats Tackle the Environment*, N.Y. ST. BAR ASSOC. (Apr. 5, 2021), <https://nysba.org/democrats-tackle-the-environment/> [https://perma.cc/M9VZ-DRDZ]; World Res. Inst., *The US CLEAN Future Act—What Is in It?*, CLEANTECHNICA (Mar. 14, 2021), <https://cleantechnica.com/2021/03/14/the-us-clean-future-act-whats-in-it/> [https://perma.cc/76BY-7GCL].

132. US HR1512, BILL TRACK 50, <https://www.billtrack50.com/BillDetail/1336189> [https://perma.cc/8Z6P-YRAF] (last visited Feb. 25, 2023).

is at an all-time high,¹³³ so legislation creating a nationwide network of EV charging stations or subsidizing state investment in EV charging installation hardly seems likely to succeed in the near future.¹³⁴ One report jointly published by public policy scholars at Columbia University and New York University acknowledges that Congressional legislative action on EV infrastructure is infeasible, but still pushes for federal action to install EV infrastructure nationwide, stating that large-scale nationwide expansion of EV infrastructure is “indispensable” to achieving necessary emissions reductions.¹³⁵

However, policy makers can develop more politically feasible approaches to increasing EV charging infrastructure by downsizing the scale of their proposals and taking a “piecemeal” approach, focusing on state-level policies that could amount to substantial emissions reductions in the nearer future.¹³⁶ A push for state-level policy changes to promote EV infrastructure is likely to be much more successful in the short term than an attempt to pass federal legislation, if only because there are fewer approval procedures to go through in a smaller legislative body.

b. Proposals for State-Level Action Focus on Government-Led Charging Station Development

Policy measures to develop EV charging infrastructure at the state level would achieve the largest emissions reductions possible without sacrificing time. Reducing emissions as quickly as possible should be the ultimate goal of policies that attempt to mitigate climate change, such as the transition to EVs.¹³⁷ At the state level, policy developers can also tailor solutions to the state’s particular needs, interests, and political leanings.

Policy research, planning, and advocacy for implementing EV charging infrastructure at the state level has likewise placed public utilities at the forefront of installation and operation; much scholarship with a state-level focus specifically addresses states that have relied on

133. Hari Osofsky & Jacqueline Peel, *The Grass Is Not Always Greener: Congressional Dysfunction, Executive Action, and Climate Change in Comparative Perspective*, 91 CHI.-KENT L. REV. 139, 143–44 (2016).

134. *Id.*

135. *See generally* Zevin et al., *supra* note 9. Note that this article focuses on creating new power transmission lines to support the transition to EVs, a different aspect of EV charging infrastructure than the subject of this Note.

136. Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129, at 13.

137. *Id.* at 14. *See infra* Section III.C.

public providers to invest in and expand EV charging infrastructure.¹³⁸ Many states have successfully taken this route. For example, the California Air Resources Board directed public utilities to invest in EV charging infrastructure as part of its Zero Emissions Vehicle Program; nine other states have followed suit after adopting the program.¹³⁹ Even after initial concerns about “stifling” potential private charging businesses were raised, California’s regulatory bodies solicited proposals for building EV charging stations from public utilities and approved fifteen of those proposals.¹⁴⁰ Some proposals allowed large public providers to own and profit from many of these stations, while others provided alternative ways for utilities to recover on their investment.¹⁴¹ On the whole, California’s approach to growing EV charging infrastructure has been driven by public utility.¹⁴²

Similarly, regulators in Massachusetts have approved large-scale public utility ownership of EV charging stations, but with some restrictions to protect private EV businesses.¹⁴³ In its approval, the Massachusetts Department of Public Utilities stated that the need to quickly expand EV infrastructure by “lowering the investment barrier” for public utilities outweighed possible harm to private investment in EVs.¹⁴⁴ In 2016, Oregon’s legislature went even further by passing legislation that defines EV charging stations as utilities and authorizes public utilities to own, operate, and profit from the stations.¹⁴⁵ Further, legislatures and regulatory bodies in other states, including Nevada and Maryland, have strongly supported public utilities as the main investors in for-profit EV charging stations.¹⁴⁶ Again, policy makers supporting a private EV charging market largely fought to limit public utilities’ ability to profit from charging stations to protect the future of this market and therefore gave less consideration to private investment as an alternative initial approach.¹⁴⁷ On the other hand, states whose governments wholly opposed public utility proposals for charging station installation, such as Kansas and Missouri, have

138. See, e.g., Klass, *supra* note 11, at 579–81; Danielle Changala & Paul Foley, *The Legal Regime of Widespread Plug-in Hybrid Electric Vehicle Adoption: A Vermont Case Study*, 32 ENERGY L. J. 99 (2011).

139. *Id.* at 579–82.

140. *Id.* at 584–85.

141. See *id.* at 586.

142. *Id.*

143. *Id.* at 587.

144. See *id.* at 588.

145. *Id.* at 589.

146. *Id.* at 589–590, 592.

147. *Id.* at 585–588.

often ended up not taking any steps towards EV charging installation.¹⁴⁸

Legal scholarship surrounding EV charging infrastructure at the state level has likewise focused on public actors, even when scholars acknowledge the varying political obstacles to this approach depending on the state at issue.¹⁴⁹ For example, the article *Public Utilities and Transportation Electrification* expresses optimism about the prospect of utility-driven EV charging infrastructure, concluding that “states in every part of the country—with very different politics” can support utility-owned EV charging infrastructure in some form.¹⁵⁰ However, Klass’s article takes for granted that private parties will be able to own and operate EV charging stations alongside public utilities in all states.¹⁵¹ She does not mention TVA or address whether state governments in every part of the country are likely to encourage the development of EV charging infrastructure if only public utilities are permitted to profit from charging stations, as within the TVA Fence.¹⁵² Given that government officials and constituents in conservative states tend to be less concerned about climate change and more concerned about increasing government authority, one could expect states and localities within the TVA Fence to resist the proliferation of charging stations that TVA would control.¹⁵³ Conservative governments and constituents would likely be especially resistant to replacing the oil industry and traditional fueling stations—most of which are small businesses—with an energy distribution system entirely run by public entities.¹⁵⁴

2. Current Approaches Fail to Consider Political Feasibility.

Scholars and policy makers have largely failed to account for political and ideological obstacles to implementing policy proposals, such as conservative opposition to publicly owned EV charging stations.

148. *Id.* at 599–605.

149. *See, e.g., id.* at 610.

150. *Id.* at 610.

151. *See id.*

152. *See id.*

153. Michael P. Vandenberg, Kaitlin Toner Raimi & Jonathan M. Gilligan, *Energy and Climate Change: A Climate Prediction Market*, 61 UCLA L. REV. 1962, 1973–74 (2014) [hereinafter Vandenberg et al., *Energy and Climate Change*].

154. *See id.*; *Convenience Stores Sell the Most Gas*, NAT’L ASSOC. OF CONVENIENCE STORES (May 19, 2022), <https://www.convenience.org/Topics/Fuels/Who-Sells-Americas-Fuel> [https://perma.cc/SWR2-LJH4]; Gavin Bade, *The Oil Industry vs. the Electric Car*, POLITICO (Sept. 16, 2019, 5:04 AM), <https://www.politico.com/story/2019/09/16/oil-industry-electric-car-1729429> [https://perma.cc/NGR2-YRDZ].

This oversight is largely due to the traditional approach to policymaking, which evaluates solutions independent of the enactment process.¹⁵⁵ The “cycle” of policy development, a foundational concept in policy studies, describes five “steps” to policymaking: “(1) agenda setting, (2) policy formulation, (3) decision making, (4) policy implementation, and (5) policy evaluation.”¹⁵⁶ Policy makers and scholars typically prioritize the effectiveness of a solution in fixing a problem over the difficulty of enacting it;¹⁵⁷ in step three of the above cycle, they determine which method would maximize the amount of desired change, commit to that method, and only then do they begin considering how to effectuate it in step four.¹⁵⁸

This process tends to produce proposals for solutions that the proponent considers “ideal.” The proposer chooses the “best” solution before considering the practical obstacles to enactment, and therefore tends to favor mechanisms for action that they see as preferable and most certain to lead to the largest amount of change.¹⁵⁹ Johnathan Gilligan and Michael Vandenberg, who have written extensively about barriers and pathways to climate change mitigation, refer to this tendency as “panacea bias” in their article *Accounting for Political Feasibility in Climate Instrument Choice*.¹⁶⁰ Panacea bias explains why liberal-leaning proponents of vehicle electrification would produce proposals that favor government actors over private markets to lead the development of EV charging infrastructure despite the fact that a private solution is more likely to succeed in conservative states.¹⁶¹

Gilligan and Vandenberg argue that this decision-making framework is not equipped to deal with policies whose goal is the reduction of carbon emissions, such as vehicle electrification.¹⁶² Generally, an “ideal” solution that takes a long time to push through

155. Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129, at 3–4, 13–15.

156. Blake Hudson, *Institutional Preconditions for Policy Success*, 89 TUL. L. REV. 669, 690 (2015).

157. Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129, at 13–15 (asserting that, while proponents of cost-benefit analyses (CBA) “advocate choosing policies that will maximize net-benefit to society,” policy developers using CBA may focus “too narrowly” on the policy’s impact and therefore may not properly account for the costs imposed by the time and difficulty involved in the policy’s enactment).

158. Hudson, *supra* note 156, at 692–93.

159. See Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129, at 14.

160. *Id.* at 3.

161. See generally Vandenberg et al., *Energy and Climate Change*, *supra* note 153 (explaining that “liberal” voters may be more “distrustful of industry,” whereas “conservative” voters are more averse to “restrictions on autonomy”).

162. Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129, at 3–4.

the political system should achieve the desired goal just as effectively as a number of small, focused solutions.¹⁶³ For many problems, “the advantages of an optimal policy” outweigh the greater delay and difficulty of enacting it because most policy problems are ultimately “reversible” in the sense that delay does not push the problem past a “tipping point.”¹⁶⁴ These types of problems “dominate the law and policy world,” so legal scholars and policy makers are accustomed to pushing for ideal solutions at the expense of timing.¹⁶⁵

However, climate change is a uniquely irreversible problem.¹⁶⁶ The effects of climate change have the potential to become more severe and permanent over time; the more climate change continues, the more difficult to achieve and less effective mitigation becomes.¹⁶⁷ The timing of climate action is just as important as the type of action itself because emissions reductions in the present will be far more effective at mitigating long-term climate change effects than larger reductions accomplished at a later date.¹⁶⁸ Therefore, in developing vehicle electrification policies, including proposals for developing EV charging stations, policy developers must give greater weight to the delays caused by political opposition than they traditionally have.

C. EV Charging Infrastructure in Conservative States: A Unique Problem Requires a Unique Solution

To expedite emissions reduction as much as possible, policy developers should promote climate mitigation plans that are most “politically feasible” in the target area.¹⁶⁹ In particular, this Note argues that policies enabling private parties to own and operate EV charging stations would be the most effective path to expanding EV infrastructure in majority-conservative states. As explained in Part II of this Note, conservative states are lagging behind majority-liberal states in developing EV charging infrastructure.¹⁷⁰ Although charging infrastructure needs growth everywhere, conservative states will likely continue to invest in EVs less than liberal states, since fewer

163. See *id.* at 3–4.

164. See *id.* 2–4.

165. *Id.* at 3.

166. *Id.* at 4.

167. *Id.*

168. See *id.*

169. See *id.* at 2–4.

170. *Alternative Fueling Station Counts by State*, *supra* note 26.

conservative states have committed to electrifying transportation.¹⁷¹ Thus, conservative states will likely fall further behind in achieving the emissions reductions that the climate change problem requires.¹⁷²

Some federal programs—such as tax credits for private individuals and businesses who invest in EV charging infrastructure—do promote the creation of a robust private vehicle charging market, and therefore are more likely to expand EV charging infrastructure into more conservative states.¹⁷³ However, within the TVA Fence, such programs are ineffective in promoting private EV charging businesses because private charging stations are functionally impossible under the TVA region’s regulatory framework.¹⁷⁴ The largely conservative governments under TVA’s authority, therefore, are generally demotivated to encourage the development of EV charging infrastructure in their jurisdictions.¹⁷⁵

Under the current regulatory scheme, the only available mechanisms for states like Tennessee to expand EV charging stations are through publicly funded entities, like local power companies, or by encouraging a TVA monopoly on for-profit EV charging. Both of these options increase the government’s role in the energy sector and are therefore unappealing to a conservative ideology.¹⁷⁶ Therefore, dismantling the regulations that give TVA its monopoly on the sale of electricity is the most promising way for policy makers to grow EV charging infrastructure in conservative states. Allowing private ownership of for-profit charging stations in Tennessee will also bolster conservative support for EV infrastructure and the EV market in general since consumer choices are impacted by political and ideological preferences.¹⁷⁷

171. *See id.*; *see also* Vandenberg et al., *Energy and Climate Change*, *supra* note 153 (asserting that conservative voters are opposed to climate change policy due to the voters’ core values).

172. *See Table of 100% Clean Energy States*, *supra* note 40 (documenting the list of states which have committed to 100 percent clean energy goals). *See generally State Climate Policy Maps*, *supra* note 40 (documenting the states which have established greenhouse gas emissions targets).

173. *See* STAFF OF H. SUB COMM. ON THE JUDICIARY, 116TH CONG., REP. ON SOLVING THE CLIMATE CRISIS 92–93 (Comm. Print 2020).

174. *See supra* Section III.A.

175. *See supra* Part III.

176. *See* Vandenberg et al., *Energy and Climate Change*, *supra* note 153; Aaron M. McCright & Riley E. Dunlap, *The Politicization of Climate Change and Polarization in the American Public’s Views of Global Warming, 2001–2010*, 52 SOCIO. Q. 155, 160 (2011).

177. *See* Amanda R. Carrico, Michael P. Vandenberg, Paul C. Stern, Gerald T. Gardner, Thomas Dietz & Jonathan M. Gilligan, *Energy and Climate Change: Key Lessons for Implementing the Behavioral Wedge 8–9* (Vand. Univ. L. Sch. Pub. L. and Legal Theory, Working Paper No. 10–24, 2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1612224 [<https://perma.cc/QE98-8QU8>].

IV. SOLUTION

A. Proposal: Enabling Private EV Charging Stations Through Federal and State Legislation

In conservative states like Tennessee, enabling and encouraging private investment in EV charging infrastructure would be the most successful strategy for expanding EV infrastructure and promoting the transition to EVs. To enable privately owned charging stations to operate in the state of Tennessee, Congress should amend the TVA Act to restrict TVA's ability to monopolize the sale and resale of electricity in its jurisdiction. Additionally, Tennessee's legislature should amend state law to exempt private vehicle charging stations from utility status and PPA restrictions. The Tennessee legislature could enact these changes to the TVA Act much more quickly than it could pass legislation supporting government-led EV charging installation because these amendments appeal to the conservative preference for deregulation¹⁷⁸ and free-market solutions and will thus face less political opposition. As addressed in Part I, there are other justifications for the creation of a private EV charging market.¹⁷⁹ However, as noted above, this Note focuses specifically on the feasibility advantages of a free-market approach to EV charging in Tennessee and states with a similar political makeup, rather than making a general argument that a private system of charging stations is "best" in the abstract.¹⁸⁰

Rather than defaulting to public utilities as the "preferred" actors for expanding EV charging infrastructure, an emphasis should be placed on mechanisms that have a realistic chance of gaining support in a gridlocked Congress and in Tennessee's majority-conservative government. While encouraging private investment in EV charging stations arguably may not be as quick or as certain to create the necessary infrastructure, this approach aligns better with the priorities of majority-conservative states.¹⁸¹ Policies supporting private investment in EV charging infrastructure are likely to face less delay from political opposition and can promote more EV infrastructure

178. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1974.

179. See Hofmeister, *supra* note 17.

180. See *supra* Part I.

181. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153; McCright & Dunlap, *supra* note 176; see also Klass, *supra* note 11, at 590 (describing the pitfalls of privately owned charging stations in California's early EV expansion efforts).

growth in the short term.¹⁸² These types of approaches will therefore ultimately be much more effective in mitigating climate change.¹⁸³ Furthermore, gaining support for EV infrastructure from government officials and constituents of conservative states will increase the likelihood of consumers supporting and buying EVs generally, since political and ideological leanings affect consumer choices.¹⁸⁴

1. Federal Law: Amending the TVA Act

Congress should amend the TVA Act to require TVA to allow outside access to its transmission lines, exempt private charging stations from TVA-set rates for electricity resale, and specify that section 15(a) does not bar non-TVA vehicle charging businesses from reselling electricity within the TVA Fence. Legislation should logically place these amendments in section 12 of the TVA Act, which lays out how TVA is able to control sale and resale within its region.¹⁸⁵

a. Open Access Rule

First, the federal government should amend the TVA Act to require TVA to allow other providers to use its transmission lines to sell and transmit electricity to consumers within the TVA Fence. The amendment could explicitly make TVA subject to FERC Orders 888 and 889—the FERC open access rule—which requires electric utilities to make their transmission lines available to other sellers for a set tariff fee.¹⁸⁶ Alternatively, Congress could insert an open access rule provision modeled after Orders 888 and 889 directly into the Act.¹⁸⁷ The provision could require open access to outside providers for all wholesale buyers in TVA’s region, or it could apply only to EV charging stations. A broader rule would weaken TVA’s monopoly on electricity sales within its region and give Tennessee cities more bargaining power in purchasing electricity.¹⁸⁸ However, such effects are beyond the scope of this Note’s discussion, which focuses only on the effects of open access for providers to sell to private charging station businesses specifically.

182. See generally Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129 (discussing the importance of feasibility determinations in evaluating incremental, short-term policy goals).

183. See *id.* at 2–4.

184. See Carrico et al., *supra* note 177.

185. 16 U.S.C. § 831c(i).

186. 18 C.F.R. § 35.1(a) (2022).

187. *Id.*

188. See Shober, *supra* note 65; see also Smith, *supra* note 66.

Imposing the open access rule on TVA would enable privately-owned charging stations in its region to exist profitably. Because outside providers would be able to use TVA's transmission lines, charging stations would have the option to purchase electricity from these outside providers as well as from TVA.¹⁸⁹ TVA would be competing in the market with other electricity providers to sell electricity to charging stations. Private charging station owners would then have the bargaining power to negotiate electricity prices with either TVA or an out-of-region provider. Charging stations could buy power at lower prices and therefore turn a better profit from sales; they would also be able to compete with each other by negotiating with providers to buy power at the lowest price.

b. Exempting Private Charging Businesses from TVA Rates

Second, Congress should amend section 12 of the TVA Act to exempt EV charging stations from the fixed rates that are set by TVA.¹⁹⁰ These fixed rates are useful for the resale of electricity by local public utilities in the TVA region; they stabilize and reduce the cost of electricity to consumers.¹⁹¹ Rate-fixing works for the distribution of power to states and municipalities by local utilities because the utilities are publicly funded and therefore do not need to profit from resales.¹⁹² However, fixed resale rates would prevent privately owned charging stations from meaningfully competing with each other by selling electricity to consumers at lower prices.¹⁹³ Furthermore, if TVA were competing with privately owned charging businesses, it could purposefully set private electricity resale rates that are too low to be profitable or set private charging stations' rates at a price that TVA's stations could undercut.¹⁹⁴ Consequently, private businesses would not be able to profitably compete in the EV charging market with each other or with TVA-owned charging stations.

If private charging stations were exempt from rate restrictions set by TVA, they would be able to determine what prices would be profitable for their individual businesses.¹⁹⁵ Charging station businesses could charge customers a variation of prices and thus compete for Tennessee EV drivers' business. If the state legislature

189. See Shober, *supra* note 65.

190. 16 U.S.C. § 831(k).

191. *Id.*; see also *Public Power for the Valley*, *supra* note 57.

192. *Electricity Explained*, *supra* note 48; *Regulated vs. Deregulated*, *supra* note 48.

193. See *Regulated vs. Deregulated*, *supra* note 48.

194. See *supra* Section III.A.2.

195. See *Regulated vs. Deregulated*, *supra* note 48.

determined that EV charging stations needed greater rate regulation, it could authorize the Tennessee Public Utility Commission to implement an acceptable price range for charging services and electricity resale to consumers. TVA could still potentially undercut the prices of private EV charging stations because it can buy electricity directly from generators. However, private charging stations would at least be able to set their own prices to compete with TVA in the market. Giving charging station businesses this ability would appeal to conservative policy makers and many Tennessee citizens because private charging stations would be better able to compete on the free market and have the freedom to determine what prices they could charge.¹⁹⁶ Conservatives would also have more faith in the ability of market competition to keep prices low instead of government regulation.¹⁹⁷

Congress could also allow states to bar TVA from establishing EV charging stations, as some states have debated doing to encourage the growth of private EV charging businesses.¹⁹⁸ Other articles have explored at length whether public utilities and power providers should be able to enter the EV charging business alongside private parties.¹⁹⁹ This Note urges the creation of private EV charging business irrespective of the participation of public utility companies in the market.

c. Clarifying the Meaning of the TVA Fence

Finally, Congress should amend the TVA Act to clarify that section 15(a), which bars TVA from selling power outside of its region, does not also prohibit other entities from reselling electricity for profit within the TVA Fence.²⁰⁰ TVA has interpreted this section to create a “two-way barrier,” prohibiting non-TVA entities from reselling electricity to consumers for profit in its region.²⁰¹ Although administrative agency courts have so far declined to rule on this question, federal courts will likely uphold TVA’s interpretation of its own statute if TVA challenges private charging stations’ right to resell

196. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74; see also McCright & Dunlap, *supra* note 176, at 160.

197. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74.

198. See Klass, *supra* note 11, at 586–87.

199. See *id.* at 545.

200. 16 U.S.C. § 831n-3.

201. Athens Utils. Bd., 177 FERC ¶ 61,021 (2021).

electricity to customers within the TVA Fence.²⁰² Regardless, the threat of litigation will likely discourage private investment in charging station businesses. Amending the statute to explicitly authorize privately owned charging stations within the TVA Fence will encourage the development and growth of EV charging businesses by protecting their right to do business. Again, conservative ideologies prioritize protecting free markets and dismantling a monopoly on energy sales created by federal regulation, which this amendment would achieve.²⁰³

Although these proposed amendments to the TVA Act would require federal legislative action, they would be more successful in Congress than legislation that supports EV infrastructure by giving more authority to government bodies or by subsidizing private action with government funds. Because proposed amendments promote the liberal priorities of electrification and decarbonization,²⁰⁴ but do so through the preferred conservative mechanisms of deregulation and private investment in the free market,²⁰⁵ they have bipartisan appeal. Therefore, these proposed amendments are much less likely to be paralyzed by Congressional gridlock than most recent legislation surrounding EVs.

2. Amending Tennessee State Law

The Tennessee state legislature could also support the growth of a private EV charging market by amending Titles 64 and 65 of the Tennessee Code to loosen regulations that currently inhibit the growth of private vehicle charging businesses.²⁰⁶ Specifically, the Tennessee legislature should amend Title 65, Section 101(6) of the Tennessee Code by adding a subsection excluding EV charging stations from the definition of “utilities.”²⁰⁷ Clarifying that EV charging stations are not utilities would protect them from being subject to the current strict utility regulations,²⁰⁸ facilitating the growth of private EV charging stations.

Tennessee’s government should further amend Title 65 of the Tennessee Code to include a section stating that PPAs between TVA and local power companies do not preclude the purchase of electricity

202. See *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984).

203. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1963, 1973–74; see also McCright & Dunlap, *supra* note 176, at 160.

204. See McCright & Dunlap, *supra* note 176, at 160.

205. See *id.*

206. TENN. CODE ANN. § 65-4-101 (2022).

207. § 65-4-101(6).

208. § 65-4-104.

for the purpose of charging EVs at private charging stations.²⁰⁹ The amendment would ensure that municipal and local governments in Tennessee can charge government vehicles at private EV stations without violating their agreements with TVA.²¹⁰ Such an amendment would encourage private investment in charging station businesses, since such businesses would have assurance that they will not be harmed by TVA's monopoly on the sale of electricity to local governments.²¹¹

Since these actions would result in less regulation, greater protection of free markets against monopolies created by regulation, and more opportunity for private business in the electric energy industry, they line up with the conservative ideological preferences of both Tennessee legislators and the constituents that elect them.²¹² Therefore, the Tennessee government will be both quicker and more confident in enacting these policies and in supporting development of the state's EV charging infrastructure.

B. The Effects of the Above Proposals

The proposed amendments will encourage and expedite the growth of EV charging station installation in Tennessee by promoting a system of EV charging infrastructure that better aligns with the preferences of its conservative-leaning residents and leaders, minimizing the delay caused by political opposition.²¹³ The legal changes proposed above enable private actors and market competition to drive EV charging infrastructure development, rather than TVA.²¹⁴ Replacing TVA with private businesses as the primary sellers of EV charging technology appeals to the conservative priority of government non-interference.²¹⁵ A greater number of competing businesses and relaxed price restrictions on the sale of electricity at charging stations will allow market forces to keep prices low, which conservatives prefer over regulatory price restrictions.²¹⁶ These proposals also encourage the

209. See generally TENN. CODE ANN. Title 65.

210. See Shober, *supra* note 65; see also Smith, *supra* note 66.

211. See Shober, *supra* note 65; see also Smith, *supra* note 66.

212. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74; McCright & Dunlap, *supra* note 176, at 160.

213. See generally Gilligan & Vandenberg, *Accounting for Political Feasibility*, *supra* note 129.

214. See *supra* Section IV.A.1.

215. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74. See generally McCright & Dunlap, *supra* note 176.

216. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74.

growth of small businesses, stimulating the state economy and creating jobs.²¹⁷ Under these suggestions, the installation and growth of EV infrastructure will receive more support from conservative-leaning Tennessee residents, and by extension their representatives, if such growth occurs through mechanisms that conservatives prefer.²¹⁸

These proposed changes to federal and Tennessee law will also minimize the delay in implementing EV charging infrastructure caused by the opposition to displacement of the oil and gas transportation industry.²¹⁹ Gas stations and associated convenience stores, the current providers of fuel to consumers with traditional vehicles, are mostly owned by small businesses.²²⁰ Under this Note's proposals, the transition from gas stations to EV charging stations in Tennessee does not replace small businesses with government-owned utilities, which would be contrary to conservative values.²²¹ Current owners of gas stations and convenience stores in Tennessee would have an opportunity to participate in the new transportation energy industry,²²² and therefore be less likely to use their significant political influence to delay the establishment of EV infrastructure.

Finally, Tennesseans will be more likely to support the transition to EVs generally, and even more likely to buy them, if Congress and the Tennessee legislature allow a private EV charging market to flourish by enacting the proposed amendments. Consumer purchases are driven, to a surprising extent, by values, including political and ideological values.²²³ Consumers make purchases that align with their values where price is equal, and in some cases even where price favors the other option.²²⁴ Conservative consumers in Tennessee are more likely to purchase EVs if they associate the EV industry with small business ownership, job creation, and supporting a free market rather than regulatory control.²²⁵

217. See Shober, *supra* note 65; see also Smith, *supra* note 66.

218. See Vandenberg et al., *Energy and Climate Change*, *supra* note 153, at 1962, 1973–74.

219. See Bade, *supra* note 154.

220. *Service Station FAQs*, AM. PETROL. INST., <https://www.api.org/oil-and-natural-gas/consumer-information/consumer-resources/service-station-faqs> [https://perma.cc/8SK7-APMB] (last visited Feb. 25, 2023).

221. See *supra* Section IV.A.2.

222. See *supra* Section IV.A.2.

223. Carrico et al., *supra* note 177, at 65.

224. *Id.* at 65.

225. See *id.*; Vandenberg et al., *Energy and Climate Change*, *supra* note 153 at 1962, 1973–74.

V. CONCLUSION

Conservative states like Tennessee currently lag behind in the transition from traditional oil and gas-fueled vehicles to an electrified transportation sector.²²⁶ By limiting Tennessee to EV charging infrastructure owned and operated by TVA, the current regulatory system blocks the opportunity for the state to develop EV charging infrastructure in a way that aligns with its majority-conservative residents' ideologies.²²⁷ Loosening TVA's vice grip on electrical power in Tennessee would create the opportunity for policy makers to encourage the installation of EV charging infrastructure while prioritizing conservative goals.²²⁸

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226. *See supra* Section II.A.

227. *See supra* Section IV.A.2.

228. *See supra* Section IV.A.2.

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